BULLETIN

MADRAS DEVELOPMENT SEMINAR SERIES

VOLUME V No. 11 NOVEMBER 1975

74, SECOND MAIN ROAD, GANDHINAGAR,
ADYAR, MADRAS-600020.

MONTHLY BULLETIN

Vol V No 11

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RENEWAL OF SUBSCRIPTION FOR 1976

The 1976 subscription for the Bulletin falls due on January 1st, 1976. Due to the increased cost of paper and printing, it has become necessary to suspend the free list, except on an exchange basis. All readers are accordingly requested to subscribe for the Bulletin.

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Cheques / Drafts / M.O. payable to the Director, Madras Institute of Development Studies, Adyar, Madras-600 020.

EDITORIAL—SOME HIGHLIGHTS

1. General Economic Scene

State:

Drought and Prices : With plentiful rains in the first half of September which was a kind of spillover of the good South West Monsoon, the drought conditions in the State were ended, with beneficial future effects for both agriculture and drinking water supplies. There was left the effects of the drought particularly in the supply and availability of food grins to deal with. CSO's index number has remained at a stable high level falling from 327 in January to 325 in April. Urban prices continued at high levels in Tiruchirapalli 308 in March and Madras 306, with a little lower level 301 in Madurai. Prices of food grains and edible oil in the city's wholesale and retail markets were static at high levels in September, and the price of pulses went up marginally. Rice was selling at Rs. 3.80 to Rs. 4 per kg. and the State government continued to receive the increased allotment of wheat and rice for October (68,000 tonnes plus 10,000 tonnes of wheat and 35,000 tonnes of rice see last issue p 514) as it did for September. The government reports that there is no offtake for the 35,000 tonnes of coarse grains available in the State and if there was no local demand, the stock would be moved to Maharashtra and Orissa where there is an unsatisfied demand for coarse grains. As will be noted in the Agricultural section, a good crop is forecast which should lead to a fall in prices. For September the government purchased 10,000 tonnes of broken rice from Andhra Pradesh at Rs. 180 per quintal out of the stock of 35,000 tonnes that the latter is holding. Also in September, a fourth ship carrying 11,000 tonnes of Thailand rice arrived in addition to the 29,000 tonnes delivered by 3 earlier ships. During the month, the ration for the 1.9 lakhs living in the city's belt areas was raised from 2 kg. to 3 kg. a week. Similarly the government has under consideration the introduction of statutory rationing in the State's border belt areas upto 15 miles as a check to black marketing and smuggling. By September the Mettur reservoir was full and during the month three flood warnings were issued in Thanjavur district as with 120.70 feet of water (94,590 million cubic feet storage) and daily inflow of 78,569 cusecs and small drawal of 10,000 cusecs for irrigation due to daily rains, there was a danger of surplus overflows. Except for the Pechiparai reservoir, all other 5 were 50-70 per cent full and the diversion of surplus Coleroon waters into the irrigation tanks in Tiruchi and Pudukottai district was undertaken. As a result, the filled Ananthangi tank will help 10,000 acres in raising paddy and the Kattalai High level and Pullambadi canals and additional 5,000 acres of paddy crop. On the drinking water side, the Tamil Nadu Water Supply and Drainage Board is intensifying its rural water supply schemes with UNICEF supplied rigs and possible aid from Netherlands which has offered collabora-

tion. In the city, with the 10,000 million gallons now available (Red Hills 4,637 million gallons, Poondi 3,887 million gallons and Cholavaram 2,066 million gallons), and the letting in the Poondi and Cholavaram water into Red Hills to conserve the water and reduce evaporation loss, the daily supply of 35 million gallons (an increase from 30 million gallons: see last issue p 514) is now assured for the next 4-5 months. Before that time the reservoirs will receive the North East Monsoon and the water supply should be normal. From September 15, the ban of fresh applications for water supply connections was lifted and the requests are being processed. However water for the gardens is still not available till the monsoon sets in.

Cauvery Waters : A Union government team visited Karnataka, Tamil Nadu and Kerala in September for continuing the on-the-spot study of the Cauvery issue. Their findings are to be discussed by officers from the 3 States to be followed by a meeting of the Chief Minister and Union ministers to agree on the proposed Cauvery Valley Authority and a detailed settlement of the issues involved (see Vol V p. 392)

State loans and Finances : The 10 State loans referred to in the last issue (p 515) were fully subscribed on the opening day, September 1. The Tamil Nadu loan was Rs. 23.75 crores plus the 10 per cent allowed excess, being part of the total Rs. 178.26 crores against the Rs. 161 crores announced. As no loans were maturing this year and no conversions had to be made, the entire loan is available for investment by the government. 11 other States announced loans for Rs. 85.75 crores on September 3, and again on the opening day September 15 the full amount was subscribed. The State's finances which had to meet a a series of policy decisions and emergencies during the last 12 months reached a difficult position in September. There was the loss of Rs. 58 crores per annum due to prohibition and the inadequate compensatory levies to replace it (see Vol III p 473 and Vol IV pp. 254 and 531), the drought has involved an expenditure of over Rs. 60 crores and the Union government's help has been only the Rs. 7 crores as of last year: there is also the plan gap of Rs. 26 crores for this year, and the promise of the Deputy Chairman of the Union Planning Commission to provide an additional Rs. 20 crores (see Vol V p. 388), which has not been received : there was also the smaller losses of revenue from banning racing from April 1 (see Vol IV p. 578) and the banning of raffles and raffle tickets from 15 September: there have been additional expenditures on DA allowances (see Vol V p 263): further the power cut and the decline in industrial production has led to a decline in sales tax receipts (computed at Rs. 20 crores). Hence the government faces the prospect of using the loan referred to above for current expenses and falling back on the use of over-draft facilities. The first thing that the Union government should do is to pay immediately some Rs. 50 crores to the State on account of the Plan gap and drought relief and in the latter case accept the States' offer of adjusting this against its Sixth Plan allocation. The State is also stepping up its resource mobilisation programme with the increase in urban taxes. It has also taken action to reduce its non-plan expenditures by banning the purchase of new vehicles for a five year period and stopping the recruitment of staff for all non-plan posts.

Power : The power supply in the State continued to be comfortable in September,

and in fact with the full reservoirs, and this period being used for the much needed repair and maintenance servicing of its thermal plants, this year's power situation is likely to be normal. The surplus power has been made available to neighbouring Andhra Pradesh, and all restrictions in the supply of power to agriculture was removed from September 15. The government has also under consideration exempting plantations, particularly the tea industry, from future power cuts, as the power input is crucial to that industry. Against a daily consumption of 22.4 million units in September, hydel generation amounted to 18 million units. Ennore and Basin Bridge produced 2.9 million units and Neyveli 2.9 million units. As a result restrictions on new connections to industries consuming 75 HP were lifted from September 22. The year's prospects for power in the State were good. Due to adopting modern cooling devices, Basin Bridge generation has been increased from 55 to 60 MW. At Ennore the first 2 units have been rectified by BHEL engineers—(60 and 55 MW). Unit No. 3 (110 MW) was taken up for work in September and the fourth unit (110 MW) will be taken up before the end of the year. Meanwhile the fifth unit (110 MW) will be commissioned by the end of October so that Ennore should function fully and normally by the end of October, with a generation capacity of 450 MW and a firm capacity of 350 MW. The vigilance cell of the Electricity Board is to start functioning from October 1 to check thefts of energy, malpractices, and allegations of consumption etc.

A satisfactory power situation also faces Karnataka and Kerala whose reservoirs are full. With the Linganamakki reservoir full, Karnataka banked its surplus energy with Maharashtra and Andhra Pradesh. Similarly Maharashtra relaxed its power restrictions in September. Industrial users were able to obtain new and additional power loads and all restrictions on agriculture were lifted. The Union ministry of energy noting that all reservoirs except Chambal are full or at a satisfactory level, hopes that with 2,600 MW additional capacity, there will be a 20 to 25 per cent increase in power availability. In rural electrification, the Union government plans to invest more than Rs. 1,000 crores during the current plan, including the electrification of 46.8 per cent of the country's villages (2,66,000 villages) and the energising of 40,20,000 pumpsets and tube wells. The Union government has decided to increase the current year's allocation to power and irrigation by Rs. 100 crores which is both a means of meeting the higher costs of inputs to attain the year's targets, and a mild reflation which the economy badly needs. The Union government also announced that its study of the report of the Fuel Policy Committee was now complete and that it will be announcing soon a National Energy Policy. It is also to be hoped that such a policy will be backed up by a National Energy Board which can enforce that policy to cover production, distribution and conservation of electricity, coal, oil and all forms of energy. On the increase of energy production, suggestions have been made for the installation of micro-hydel stations on canal systems, the building of reservoirs in the Himalayas to conserve water in the dry season, December-March, and the use of the pumped storage system for peaking purposes.

Farm wages and MBO in government: The government has set up a 5 member committee headed by Mr. S. P. Srinivasan to examine and advise on the minimum wages for agricultural workers and those

ancillary to agriculture. In 1973 the last revision of these wages was effected, and now after 2 years of inflation there is need to re-examine the wage levels. It is expected that the Committee will make its recommendation by the end of the year. In the government, the Management by Objective (MBO) Programme is being extended from the Stationery and Printing Department, the Directorate of Industries and SIDCO to the Directorate of Agriculture. This result rather than input oriented technique is helping each officer to define precisely his role and responsibility. There are also economies accuring. The Stationery Department, for example, saved 200 tonnes of paper in 4 months just by showing that over printing of forms was not necessary.

Transport : Pallavan Transport Corporation has effected a 10 per cent saving in diesel oil consumption, saving Rs. 35 lakhs annually through derating full pumps, vehicle maintenance and regulating the speed by fixing tacho metres in each bus. The re-modelled mofussil bus stand in Broadway was opened in mid September at a cost of Rs. 6.5 lakhs to service 350 buses operating per day with 21,000 passengers. The improved drainage, stopping facilities and passenger amenities are a real advance over the old stand. The Cheran Transport Corporation with an income of Rs. 717.25 lakhs, and expenditure of Rs. 679.99 lakhs for the year, showed a profit of Rs. 40.26 lakhs against a share capital of Rs. 50.1 lakhs. This was despite the increase in motor vehicle tax by 43 per cent, diesel oil by 15 per cent, lubricants by 100 per cent, tyre prices hike by 36 per cent and spares by 33 per cent compared to last year. This is a good record of improved efficiency. The Corporation's Board with workers on its management decided to plough back their bonus of Rs. 9.05 lakhs to expand its activities. The Corporation is starting at Mettupalayam a recycling plant for lubrication oil at a cost of Rs. 5 lakhs. It will save for the Corporation Rs. 3.5 lakhs and for all the State's Transport Corporations Rs. 9 lakhs in lubricating oil. In September also the new port of Tuticorin with its 30 feet draft second berth was commissioned. In the next stage the ware houses will be completed and a permanent oil jetty construction is to be started. There is also the question of constructing a completely mechanised coal berth with a conveyor system to transport coal rapidly to the thermal station that is coming up there (see Vol V p. 391). The Madras port authorities have submitted to the Union government, a plan to further deepen the Bharathi dock which has a draft of 46 feet, to have a draft of 49 feet. The ore berth is complete and the mechanised ore receiving system is now under construction. The fisheries harbour originally planned to handle 40,000 tonnes is being expanded to take 80,000 tonnes of sea food per annum. Compared to the monthly traffic of 7 lakh tonnes last year, the port handled in July of this year 8.09 lakh tonnes. In August it handled 19,000 cases of tobacco to Russia, 84,000 tonnes of wheat from the US and 21,200 tonnes of Thailand rice. Handling procedures have been speeded up and so is the turn around of vessels. Another important transportation facility is the Buckingham Canal which serves both Tamil Nadu and Andhra Pradesh. A sound system of road transport, part of it air-conditioned, supported by inland water and coastal shipping can reduce transportation wastage, prevent deterioration, quicken the pace of delivery and ensure timely supply of goods.

Housing : By September end the Tamil Nadu Harijan Development and Housing

Corporation completed building of 30,000 houses for harijan families against the long term target of 10 lakh houses, which is to be executed in a phased manner. The Tamil Nadu Housing Board proposes to build 1,052 luxury flats in the neighbourhood of Madras at a cost of Rs. 5.4 crores for Indians living abroad and who wish to buy these houses for residing in the city and who will pay the full cost in advance. These flats for the High Income Group (HIG) with a land cost of Rs. 21,000 and a plinth area of 1,450 square feet will have construction cost of Rs. 87,000, while Middle Income Group (MIG) flats with a plinth area of 934 square feet will cost Rs. 47,000. Local citizens can also purchase these flats to be constructed in Anna Nagar, K. K. Nagar, Indira Nagar and Besant Nagar provided they pay 50 per cent of the cost in advance. In addition the Board is constructing 490 self-financing MIG flats in Nandanam colony, 640 tenements for the Economically Weaker Sections (EWS) at Mambalam, and 200 at Visalakshi Estate. As at September the Board had built 1,021 houses out of the programme of 2,963 for EWS, 2,173 for LIG, 1,159 for MIG, 1,881 for government officials and 964 slum clearance tenements in the mofussil. The Union government Works and Housing ministry reports that it has subsidised 1.82 lakh houses for ESW, as part of the programme to build 2.45 lakh houses at a cost of Rs. 118 crores. The ESW scheme will now cover those with incomes of Rs. 351-Rs. 500, provided they pay an additional 50 per cent interest charge.

National :

Fifth Plan: In light of the relative price stability now prevalent, to be referred to later, the economic reviews undertaken, also to be referred to later, and the third year of the Plan being a critical year, two sets of actions are underway on the Fifth Plan. One is to prepare for the third year Plan (1976-77) of the Fifth Plan. This year's plan increased investments by 23 per cent, and there is the suggestion that next year's investment be stepped up by 40 per cent. This will have to be done, as the third year is the turning point and will decide whether we get anywhere near our targets. Out of our projected public sector outlay of Rs. 37,000 crores, in the first 2 years we totalled Rs. 10,000 crores. This means that the last 3 years must average Rs. 9,000 crores a year as against Rs. 4,844 crores in the first year and Rs. 5,978 crores in the second year. Then there is the question of continuing to concentrate on the core sector which receives a new dimension, because, even with an outlay of Rs. 37,000 crores, the targets will have to be revised downwards as a result of the 2 year hyper inflation and the certainty that, though price stability is now reigning, it is stability at a high price level and so reduces the achievement targets. This means that outside of agriculture, power, coal and oil there will have to be sharp downward reductions. There is also the looming trade gap for this year which, on certain assumptions, will be larger than last year's large deficit, unless action is now taken to cut back on some of our imports—food grains, fertilisers and crude. And finally there is the resources position. As noted in earlier issues, the first 2 years have seen a massive mobilisation of resources, the 1974-75 mobilisation being Rs. 6,948 crores. The Union's revenue measures raised Rs. 690 crores and the State Rs. 358 crores. For this year, the States have already raised Rs. 100 crores by August end out of the Rs. 178 crores that they had to. But the possibility of further raising new resources in the remaining 3 years of the Plan is not inexhaustible. It is in light of all these factors, the Union Planning Commission has issued guidelines to the States to

prepare their Third Year Plan, will review and agree upon their Plans in November and December, and hopefully finalise the Fifth Plan by the end of the year and have it reviewed and approved by the National Development Council early next year. There is the second major issue, the finalisation of the Draft Fifth Plan and at this stage as noted earlier it looks as though, except for the irrigation and coal mining sectors, there will have to be a reduction of targets: (a) savings from 15.7 per cent to 15 per cent which is attainable, though the base was not the 12 per cent assumed in the Draft Plan: (b) public savings from 6 per cent to 4.5 per cent of GNP, for which non-plan expenditure must be slashed from the current 2.5 per cent of GNP: (c) food production at 112-125 million tonnes instead of the projected 140 million tonnes: (d) installed power 13 million KW and not 16.55 million KW: (e) steel at 9.9 million tonnes instead of 11.7 million tonnes, given the spillover of Bhilai's extension to the Sixth Plan: (f) fertilisers at 5 million tonnes instead of 6 million tonnes: (g) coal to grow at 8.4 per cent: (h) petroleum consumption to be 30 million tonnes instead of 34 million tonnes: and (i) irrigation to be 8 million hectares instead of 6 million hectares. This means overall growth in manufacturing will be 7 per cent instead of 8.1 per cent, exports should grow in quantum terms by 7 per cent per annum, and to avoid any increase in trade deficits food imports should be reduced to 2 million tonnes by the end of the Plan, which can be done provided agricultural production is of the order of 125 million tonnes. The real pinch in the balance of payments also will occur in the Sixth Plan, when the short-term credits from the IMF and the oil producing countries will fall due and, our Fifth Plan chickens will come home to roost.

State of the Economy: The RBI annual report for 1974-75 presents a review of the Economy for the year 1974-75. The major fact during the year was the containment of inflation, the monthly average for the year being 16.9 against 25.3 per cent for 1973-74 and as between June end 1974 and June end 1975 only 0.6 per cent. It is perhaps going too far to characterise this as a measure of balance between supply and demand conditions. Rather it was essentially a result of demand management, such as efforts to contain the budgetary deficit which however did not succeed because of dearness, allowances, increased food subsidies, larger purchases of fertilisers and additional outlays for capital formation. Hence the 1974-75 budget deficit was Rs. 1,048 crores as against the previous years's Rs. 727 crores. Some part of this larger deficits—the drawals on IMF credits, the import of food and fertiliser were not inflationary: Also the government regulatory measures immobilising one half of DAs (Rs. 209.6 crores) and the increase in revised wages and salary (Rs. 33.1 crores), the compulsory deposits for the higher income groups (Rs. 569 crores) restrictions on dividends were anti-inflationary. In addition, RBI followed a credit and monetary policy which restricted expansion through the designing of priority sectors for credit and a higher interest rate structure, resulting in 0.9 credit expansion in the 1974 slack season compared to 5.6 per cent in the 1973 slack season, gross credit expanding by Rs. 1,009 crores or 12.9 per cent in the 1974-75 busy season compared to Rs. 1,355 crores or 20.7 per cent in the previous year's busy season, the growth in deposits lower at 14.9 per cent against the previous year's 17.4 per cent and money supply with the public increasing by a small 6.3 per cent at Rs. 725 crores compared to the previous year's 14.9

per cent at Rs. 1,488 crores, savings declining from 12.1 per cent of national income to 11.8 per cent in 1974-75, (which is different from the last annual report of RBI), the major decline being in the household sector offset to some extent by increase in public sector savings (central government savings rose from Rs. 17.1 crores to Rs. 669 crores in 1974-75), and private corporate sector also increasing its share of savings. The aggregate investment, however, increased a little, along with a 2 per cent of GNP inflow of foreign aid funds. The other negative factor beside the increased government dificit is the huge trade deficit of Rs. 1,096 crores (see Vol V p. 402). National income which increased by 3.1 per cent in 1973-74 and declined by 0.9 per cent in 1972-73, looks as if it increased by 2 per cent in 1974-75. This deceleration in growth was largely due to the poor performance of aggregate agricultural production, particularly the sharp fall in jute output and the decline in the oil seeds. The system of public distribution was under strain through the year and had to be fed by imports. Industry recovered from its stagnation in 1973 and registered a 3 per cent growth in 1974 and gathered real momentum in coal, power, cement and steel in 1975. On the basis of the containment of inflation and the decipline introduced by the emergency, the RBI report rather optimistically concludes that this year should see a growth of 5-6 per cent and that this should be the experience of the remaining years of the Plan. This can happen if there is a sensible rise in investment, in the core and the public sector, and an additional effort at resource mobilisation particularly in the agricultural sector is made.

Prices and anti-inflation: August marked a stopping of the declining in wholesale prices over the last 6 months, as the revised August 2 index stood at 309 (and not 308.3 as reported in the last issue p. 520), at 310.5 on August 9, 311.8 on August 16, 313.1 on August 23 and with a small decline to 311.6 on August 30. Thus the month's rise averaged a little over one per cent, mainly due to the rise in food articles by 6 points and industrial raw materials by 10 points upto August 23, when it fell by the same number due to the fall in groundnut prices. Chemicals rose by 2.8 points. The government continued its regulatory and RBI its credit control measures. In addition in early September the government banned under the Companies Act any fresh appointments of sole selling agents in Sugar and Vanaspathi industries as part of a plan to overhaul the distribution system and reduce the number of intermediaries and monopolists in trade. The ban is aimed at reducing distribution costs in the hope that the reduction will be passed on to consumers. To ensure orderly movement and availability of items of mass consumption at retail points, the Union government has issued guidelines to States to license wholesalers whose stocks are maintained at a low level, to monitor available stocks, to scrutinise items in displayed price lists, and create a climate for honest elements. The Ministry of Petroleum and Chemicals has evolved a pricing pattern for life-saving drugs so that they are within the reach of the poor. In mid September the ban on sole selling agents was extended to cement and paper, and the government reports that for an additional 15 commodities from textiles and sugar to engineering goods there are such shortages that there are no sales promotions needed. There are also the restrictions on non-banking non-financial companies receiving deposits as a means of discouraging these bodies borrowing from the public. By early October the project for the establishment of 15 rural

banks (see last issue p. 522) to cater to the credit needs of small farmers and other weaker sections in the rural areas will have been launched. With first group of 5 rural banks at Moradabad and Gorakhpur in UP, Bhivani in Haryana, Jaipur in Rajasthan and Malda in West Bengal. Each bank will have an authorised capital of Rs. one crore and a paid up capital of Rs. 25 lakhs, contributed in the ratio of 50:15:35 by the Union government, the State government and the sponsering commercial bank, which are the Syndicate Bank, SBI, Punjab National, UCB and UBI. They will grant loans to small and marginal farmers, agricultural labourers, rural artisans and small engineers and traders at low interest rates. They will also make consumption loans for education and medical purposes under established ceilings and will be on a par with co-operative banks. On the negative side, the floods in UP, Bihar, Orissa and Gujarat not only have caused extensive damage to human life and losses in agriculture and live stock but the flood relief bill put forward by the 4 States exceeds Rs. 1,000 crores. Whatever is finally expended will be an inflationary element. Similarly the overdues reported by the co-operatives increased from Rs. 18 crores in 1967-68 and Rs. 38 crores in 1971-72. Except for Tamil Nadu where overdues were 20 per cent of the loans, in other States it ranged from 40-60 per cent. It is hoped that the Rural Banks will not face this problem and so add to inflation. They are one part of the programme of integrated rural development with agriculture as the core sector in the campaign against poverty and part of its success will trace to its being so integrally planned and operated.

National Production Front:

Industrial Growth : In the context of industrial growth trends referred to earlier, certain specific developments in September need to be noted. On the positive side the list of 23 crore industries is being reviewed by the Union government in order to permit large industrial houses and foreign companies to participate in them under defined conditions. Also the licensing procedures are being speeded up. In a fortnight in September, 1,200 licenses had been cleared, and only 20 Industrial and capital goods licenses were pending for over 90 days. In certain industries like industrial machinery, machine tools, electrical equipment and steel castings and forgings, authority to diversify has been delegated to the ministries concerned. The latter have also been authorised to dispose of applications for industries which have been brought back into the licensing frame. Also the ministries can now extend the validity of industrial licenses and letters of intent without prior approval of the licensing committee. Export oriented engineering industries can now operate under one central approval committee instead of having to secure approval of several committees. About 20 industries have been allowed an annual expansion of 5 per cent under a 25 per cent ceiling. At last industries are allowed to use their R and D results for commercial purposes and in the case of industries coming under MRTP and FERA, they too can, in areas covered by appendix I of the industrial licensing policy of 1973. Also credit for discounting charges of machinery and for increasing rates of production have been arranged with banks. The wagon industry problems are being attended to by a new unit set up for this purpose and a complaint cell has been set up for aid in clearing new investment or increased production proposals. It is also reported that the Union Planning Commission has reported negatively on the proposal for the creation of a "national sector" to

replace the current mixed economy on the grounds that it will create new forms of monopoly power, will introduce new distortions in the economy, will require a complex set of laws and will promote inefficiency. This kind of theoretical debate clouds the industrial horizon and diverts attention from the major task of reviving the industrial sector. On this point, the automobile sector faces a sharp fall in demand, so that in the first 7 months of 1975 only 14,000 cars were produced involving an annual production of 24,000 cars against an installed capacity of 47,500 and 1973 production of 39,000 cars and 1974 of 36,000 cars. The Fifth Plan target of 1.6 lakh cars is far away and the chain reaction on the ancillary and allied industries can be serious. The cut back in non-development expenditures and the ban on all purchases of cars by this State government simply add to the problem. There is no easy way out of this situation. Price reduction, decontrol, tax exemption have been tried. In addition diversification should be pursued more effectively. Another area that has been hit is the 100 mini steel units, with their 3.5 million tonnes capacity, which trace back to the spurt in steel production by the integrated steel plants, the drop in public sector investment, decline in construction activity, and the import of 2 million tonnes of steel. The relief here may come from the programme to export the product from the integrated steel plants—atleast to some extent. Finally there is the problem of the contraction in investment and demand consequent on the measures successfully taken to counter black money and the black market. The result has been a sharp fall in demand, investment and entrepreneurship around certain industrial sectors starting with construction, going on to transportation (trucks cars, tyres and ancillaries), railway earnings and wagon usage, textile trade, consumer durables, electric appliances and inventories generally. Unless some action is taken to replace the investment resources now withdrawn by black money and the parallel market and the entrepreneurial input, there is the danger that recessionary trends will become serious for the economy.

Public Sector: In terms of targets, turnover and profits, the public sector continued to do well in August, its 27 units producing Rs. 65.69 crores for the month being a 56.45 per cent increase over that of August 1974. For April to August total production was Rs. 260.72 crores, being 87.68 per cent of the target. Among the units, BHEL achieved 105 per cent of its target at Rs. 31.84 crores in August and Rs. 132.12 crores in April-August. Similarly Triveni structurals, Bharat Pumps and Compressor and ISW-Burn crossed their August targets, while Hindustan Photo Films and Bharat Ophthalmic glass increased their production by over 180 per cent over August 1974, Cement Corporation at Rs. 59.97 lakhs and NEPA at Rs. 127.71 lakhs also crossed their August targets. The 1974-75 report is equally good. The total sales of the Public Sector units were over Rs. 10,000 crores (from Rs. 6.777 crores in 1973-74) and the profits after tax was Rs. 150 crores (up from Rs. 64 crores). They have dropped their 10 per cent price preference and have agreed that the productivity staff should be involved in execution and should be rotated among the determents and units. For the future, the Planning Commission has developed guidelines for the preparation of feasibility reports for industrial public sector projects, which, apart from project information, should provide analysis of alternatives, market analysis, capital requirements and costs, operating requirements and costs, financial and social profitability analysis. The guidelines require also information on the technology to be used on site, equipment

input and labour needs, phasing of construction and production. In other words the data will provide technical, financial commercial and social profitability analysis as a basis for appraisal by the Bureau of Public Enterprises, the Ministry of Finance and the Planning Commission. This might alleviate, if not avoid, some of the serious problems in the public sector to which the ministry of Finance calls attention. One is the low level of productivity in the units, the most glaring of which is steel, which in Japan is 500 tonnes per man year against India's 50 tonnes. As a result while 80 per cent of investment had gone into investment in the central public sector, their output was only 50 per cent of that sector. The poor return on investment is shown in chemicals and pharmaceuticals where one rupee of investment should produce one rupee of goods, but in 1973-74 it produced only 30 paise. There is need to improve productivity in the public sector and in the private sector) to achive better capacity use, better maintenance of equipment, a critical look at staffing and better management of men and materials, including scientific inventory control.

Steel: Durgapur continued its improved production in August at 85,435 tonnes of steel ingots and the government has under consideration expanding its capacity. SAIL was able to plough back Rs. 30 crores from the accrual resulting from the dual pricing policy to the Central Fund. This sum has been used in line with the Fund's purpose of modernisation and development of the steel industry, for balancing facilities, ancillaries, rehabilitation, mines and power machinery development and equipment replacement. In fact SAIL's annual report for 1974-75 shows a net profit of Rs. 39.27 crores against a loss of Rs. 2.75 crores for the previous year. This profit is after paying interest on term loans amounting to Rs. 23.86 crores and depreciation of Rs. 87.79 crores. The report which lists Bhilai as the major contributor to the profits followed by Rourkela explains the main factors for their favourable situation, namely, higher production of saleable steel and pig iron, efficient use of raw materials, reduction of overheads due to better distribution of products. In this bright picture, Bokaro is facing some delay due to the the slipping in HEC's supply of equipment. On the first stage of 1.7 million tonnes the equipment which should have been supplied by HEC by January 1972, the delay has been over 5 years For the second stage of 4 million tonnes, instead of the supply of the 1,800 tonnes, 500 tonnes of HEC equipment has been supplied. There is here a double dilemma. HEC's order books must be filled if its heavy investment and capacity are not to be wasted. Importing the equipment, in this case from USSR, would be the easy way out but that will seriously affect HEC and its viability. Hence the trade off is between the time lag in the gestation of Bokaro and all that it involves and the continued import of steel in this period of the time lag. In this case the former line is indicated. The steel Ministry is studying again its proposal for setting up additional capital power generating capacities at the steel plants totalling 550 MW at a cost of Rs. 210 crores to isolate Rourkela, Durgapur and Bhilai from DVC and MP Electricity Board cuts and load shedding. Here again there is a trade off that needs to be worked out, and on the whole it seems as if the normal grids should be strengthened rather than multiplying captive plants in the public sector. The problem faced by the mini steel plants referred to earlier may be met to some extent by reduction in the excise duties levied on their products and this is under study by the government. September also saw a number of important

decissions on the export and import of steel. With the 16.2 per cent increase in steel production during the first five months of the current financial year and the slackening in domestic demand due to multiple factors including withdrawal of black money and the slow down in construction, the Union ministry of steel is planning to set up steel stock-yards in those countries where the demand for Indian steel justifies it. In the current year the target is to export 1.2 million tonnes of iron and steel, earning Rs. 100 crores mainly from West, South East and East Asian countries, Africa and Western Europe. Bhilai reports foreign exchange of Rs. 6.8 crores this year, exporting 18,000 tonnes in August. More important the government feels that steel imports can be reduced to Rs. 70 crores this year against last year's Rs. 200 crores. This follows the more clear matching of imports against priority areas, particularly in items such as steel cutting, hot rolled sections, electrical steel sheets, high carbon steel strips and stainless steel. On steel imports from the general currency area (GCA), the government abolished in September the differencial 8 per cent surcharge as the price differential between GCA and Rupee Payment area steel has disappeared, and has introduced a system of protection of exporters from increased steel price (above 10 per cent). This package should stimulate steel exports and cut back imports.

Crude: The major event in September was the decision of OPEC to raise crude prices by 10 per cent, from October 1 to 30 June 1976, which means an increase from $ 10.46 per barrel to $ 11.51 per barrel, which on the assumption of India importing 14 million tonnes would mean an additional foreign exchange outgo of Rs. 108 crores in a full year. For this year, the increased payment on account of the price rise is likely to be Rs. 54 crores. For the West and Japan it will mean an extra $ 10,000 million payment, for EEC $ 4,000 millions. The Union government had imported 2 to 3 lakh tonnes of additional crude as a hedge Against this serious situation, the completion of the first phase of the change over from fuel oil to coal in selected thermal plants and the chemical industry announced in mid September by DGTD is to be welcomed. This results in a saving of 1.1 lakh tonnes of fuel oil per month for this year and will save 2.23 lakh tonnes per month in 1976-77 and 4.63 lakh tonnes per month in 1977-78. This is the result of the survey of 309 industrial units in 8 cities including Madras and Coimbatore in this State (see last issue p. 525), which showed Kerala as the most economical user and West Bengal as the least one, and the tea industry as the most wasteful user fuel oil. 90 industrial units surveyed have accepted the fuel efficiency recommendations as technically feasible and when they act on it within the next 3 months to 2 years, there will be an additional saving of 1.9 lakh tonnes of fuel oil per month. But this also means supplying coal to those industries at the rate of 1.5 million tonnes per month. As a result of a number of measures, petroleum product consumption had been reduced by 32 per cent in the country. Due to good rains, there is a sharp fall in crude demand and some of the refineries like Barauni have had to store their products. The inventory position is good, storage points are full of stocks, and the higher demand of the busy season will be met. On the production and exploration front, following the Kuwait credit of $ 100 million for Bombay High, the Euro dollar market has offered commercial loans to ONGC for Bombay High, so that now both Arab and Euro dollar finance can be used for the project including the building of submarine

pipelines to transport the oil. Also the first well in the Orissa—West Bengal coast was spudded on September 22, as a result of the drilling by the US Carlsberg - India group. This is the first result of seismic surveys started by the group in September last and completed in June, and the resulting exploration of 5,000 sq. KMs to be undertaken. The oil structure is not as large as Bombay High, but is extensive over 500 sq. KM. Reading and Rates have completed their seismic surveys of the Kutch basin and will begin exploration in October. ONGC is also setting up in Dehra Dun data processing machines to process the seismic data from the Cauvery offshore area now being gathered by "Anveshak", which has completed its survey of over 1,250 KM in the Cauvery offshore area and whose results will be examined by ONGC in November for decision on farming out its exploration. On one shore, ONGC and Oil India (OIL) have done well in 1974-75, the former exploring 75,463 metres against a target of 70,000 metres and the latter drilling 350 wells. ONGC's production of crude in the Eastern region increased from 0.42 million tonnes to 0.64 million tonnes. Outside India ONGC is not only drilling its first exploratory well in the 4,260 sq. KM area in Iraq (see last issue p. 524), it is undertaking seismic surveys for the Iraq Oil Company in the Southern region of the country, adjacent to its concession.

Coal: Coal production in the first five months of the financial year April-August, increased by 4.04 million tonnes compared to that of last year's first 5 months and the target of 10 million tonnes additional coal for this year will be attained. After the monsoons, the production programme goes into full gear and hence the increase may even be above the targeted 10 million tonnes. CMA is tightening up its recruitment and man power utilisation procedures and is raising the per capita output from 0.61 tonnes to 0.69 tonnes. The stocks with the major consumers are comfortable, 10 days stock in coal plants, 4 weeks in the steel plants and similarly with cement and railways. Daily coal loading were 1,950 wagons in July against the target of 1,800. The Union ministry of Energy announced in September a reorganisation of the coal industry converting CMA into a holding company, Coal India Limited, having as subsidiaries CMA, BCCL, and CMPDI. The aim is to streamline management, ensure unified and integrated control, promote R and D in coking and non-coking coal and develop a common coal cadre which will ensure optimal use of manpower. The working of this new organisation will be tested in the coming months against the growing demand for coal production and delivery to replace crude, noted earlier.

Paper: Unlike the paper shortage faced by the country last year (see Vol IV pp. 192 and 424), there is this year an over supply of white printing paper. The industry reports that between May and August 1974 not even 25 per cent of the 40,000 tonnes of white printing paper allocated by the joint committee was lifted. The obligation to produce 30 per cent as printing paper and the absence of firm orders and lifting have increased the inventory position sharply. Hence in September, the government reduced further the 57 per cent control over the industry, has made ISI specifications statutory for white paper production, and has lifted the ban on the use of coated paper. Now all paper mills having 25 tonnes per day capacity are exempted from control. This means that only 45 per cent of the paper industry production will be under control. The percentage of white printing paper remains fixed at 30. The easing of the paper

situation has been particularly helpfull to educational institutions and students who have been issued adequate quantities of paper at controlled rates.

Irrigation, fertilisers, farm wages and land reforms : The government decision to increase the current year's plan outlay on irrigation and power by Rs. 100 crores has been noted earlier. But this is not the end. To achieve the plan target of 6.2 million hectares (including the Prime Minister's 5 million hectares in the 20 point Plan), an additional allocation of Rs. 714 crores will be needed (over and above the Rs. 2,401 crores provided in the draft plan). To this must be added the escalation of costs element. This 6.2 million hectares target also involves the Central Ground Water Board's plan to cover 0.5 million square KM through a hydrogeological survey and bring 4.5 million additional hectares under cultivation from identified ground water schemes. Alongside CWPC has drawn up proposals for raising irrigarion rates involving, (a) setting up Water rates Review Boards in the States, (b) a 4 year review of the rates or when the farm product price rises by 15 per cent, (c) a minimum irrigation cess every cultivable unit in the command area and (d) different rates for special crops. This would improve productivity and increase the State revenues. Apart from the States' action on rural debt relief undertaken by Tamil Nadu and 12 States, most States have upgraded agricultural minimum wages and have set upspecial machinery for its implementation. The revised minimum wages vary from a high one in Kerala (Rs. 8 per day) and Punjab and Haryana (Rs. 7.70 and 7) to Rs. 2—Rs. 3 in Tamil Nadu. These improvements however still leave the vast majority of agricultural workers being below the poverty line. On land reforms, the Union government is sending out teams to identify the bottlenecks in each State. For instance in Tamil Nadu of over 4 lakh returns filed, the number verified was only 77,071. The legal appeals is another hold up and as a result in West Bengal only 12,000 acres and in Andhra Pradesh 15,000 acres have been distributed. The bottlenecks can also be removed by a more committed cadre of workers. Fertilisers allotment for the kharif season is 21,40,881 tonnes, with Andhra Pradesh receiving 3,19,055 tonnes, Maharashtra 2,65,512 tonnes and Tamil Nadu 2,59,336 tonnes. The April-August production of nitrogenous fertilisers was 83,000 tonnes more than that of last year's first five months. The total production in this period (April-August 1975) was 5.2 lakh tonnes and in August 1.24 lakh tonnes. This good result in the public and private sectors which is much needed was due to improved management, industrial peace and greater availability of power. It is to be hoped that the 3.3 per cent fall in fertiliser use in 1974-75, mainly a decline by 17.2 per cent in phosphatic fertiliser use, will be arrested with the lower price noted in the last issue p. 526 and the good rains.

Agricultural Production: The Union government's forecast is that kharif production this year will exceed 70 million tonnes involving an 8 per cent growth of 114 million tonnes in agricultural output for this year 1975-76. A bumper crop is expected in rice, jawar, bajra, groundnut, sugarcane and cotton. Rice production is expected at 47-50 million tonnes, with Andhra Pradesh, Karnataka and Tamil Nadu having a bumper crop, Maharashtra, MP and Punjab surpassing last year's output. Gujarat and Rajasthan will have a good bajra crop. The groundnut crop is also expected to be an exceptionally good one at 64 lakh tonnes, Sourashtra alone producing 12 lakh tonnes. State-

wise production will be (in lakh tonnes), Gujarat 15, Tamil Nadu 5, Andhra Pradesh 4.50, Maharashtra 5, UP 3, MP 2.50. As a result groundnut oil prices have fallen sharply. There have been also heavy losses due to floods in Orissa where 2 lakh hectares crop was distroyed at a cost of Rs. 50 crores, in UP where flood waters swept over 22 lakh acres and damage Rs. 180 crores worth of crops, with similar losses in Bihar and some areas of Punjab and Haryana. The estimates of the overall crop position however takes account of these losses. The Union government has decided on a kharif procurement target of 5.3 million tonnes (as against last year's kharif procurement of 3.9 million tonnes). The Agricultural Prices Commission has also recommended the paddy procurement price of Rs. 76 per quintal, for the medium variety and Rs. 80 and Rs. 85 for 'Parmal' and 'Basmati' varieties. For coarse varieties the price of Rs. 74 is recommended. The government is in the course of discussing the price with the State governments in September and the APC recommended prices which are similar to those of last year will be adjusted by the States to help their procurement drives, meet the farmers' demands to offset their higher costs and so respond to local conditions. From the long run point of view, the government is acting on ICAR's advice that regions which are prone to floods annually should grow wheat and not rice. Also it has launched a programme of integrated command area development, wherein 51 irrigation commands with a cultivable area of 13 million hectares will have farm development works comprising construction of field channels, field drains, land levelling and land shaping operations as means of promoting multiple cropping and an increased level of productivity. Also, a National Seeds programme has been launched wherein State seed agents will distribute the seeds through 25 retailers in each block in addition to co-operatives. With the 10 per cent reduction in the price of quality seeds announced in early September, it is hoped to co 30 million hectares this year with HYV seeds. The Union government has further initiated a Rs. 12 crore schemes for the development of market yards and infrastructural facilities in regulated markets to safeguard farmers' interests and prevent malpractices. In 3 years, the 275 regulated markets will be provided in particular with facilities for cleaning, grading and storage, accurate weighing facilities, drying and auction platforms and shops for sale of inputs and consumables. To counter the loss of 8 per cent of standing crops and another 8 per cent while in storage from rats estimated at Rs. 700 crores, ICAR is launching a national rodent control plan, providing training to workers at 8 centres and using farmers and youth organisations in the campaign. Finally a time bound, time oriented 9 point programme for afforestation of waste lands and reclamation of ravine lands at a cost Rs. 2,000 crores has been developed by a research group in New Delhi. The major aspects of the programme include windbreak by afforestation, rehabiliation of saline and alkali areas, stabilisation of sand dunes and treatment of catchment areas. The cost can be phased over 3 or 4 plan periods.

Exports : The major event in the foreign trade field in September was the decision of the government to delink the Rupee from the Pound and to determine the daily exchange rate movements in relation to a selected number of currencies of countries which are India's major trading partners, as has been advocated by this Bulletin in the past and in the second article in this issue written in May of this year. This replacement of the pound link by a basket of currencies (the

precise content is not revealed) means that the pound sterling will be used as the currency of intervention and the provision of forward cover. RBI announced revised rates for its purchase and sale of pound sterling for spot and forward delivery from September 25 itself, when it announced the delinking. This was also the immediate responce to the worsening of our overall balance of payments position, where our reserves declined by Rs. 78 crores to Rs. 891 crores in June and by Rs. 235 crores over the year July 1974 to June 1975. The RBI July Bulletin, however, reports that India's net foreign liabilities increased by only Rs. 1,572 crores to Rs. 6,773 crores in the 4 year 1968-72 because we paid off foreign debts fast. The delinking is part of the strategy for expanding our exports and cutting back on our *trade deficit.* In April-May the deficit was Rs. 105 crores (in April-May 1974 it was Rs. 241 crores), and world trade which is expected to increase by 2 per cent (against the past 7 per cent) will present no favourable environment for the expansion of our exports. For the first four months, April-July exports stood at Rs. 1,076.72 crores, which at 12.6 per cent was over double the increase of the first four months of the last financial year. While the monthly average of exports was Rs. 269.18 crores in the first four months this year (compared to Rs. 239.10 in the first 4 months of the last financial year), imports averaged Rs. 351.07 crores during April-July 1975, whereas it averaged Rs. 332.69 crores during this period last year. The moral is that imports have to be cut, particularly crude and food grains, if a second year large deficit is to be avoided. On individual export items, the engineering industry faces a loss of Rs. 9 crores of commercial vehicles orders due to the delay in deciding on cash assistance beyond September 30. Similarly rubber exports are facing rough weather because of the declining price trend internationally and the non-competitiveness of our products. The woolen hosiery industry is also facing somewhat difficult conditions due to slow-down in overseas demand. The government is launching schemes of producing export garments from imports under a bonds scheme. On the other hand the 13 lakh sugar exports are reported to fetch Rs. 475 crores this year. As of August, STC had contracted for 7.5 lakh tonnes valued at Rs. 315 crores. Again ECGC is helping to expand India's consultancy services abroad and so increase our invisible exports. The latest agreement with Czechoslovakia which provides for use of our spare capacity in structurals, storage tanks, welding housings, transformers and electric motors, coach bodies and batteries for rail cars in order to export them to Czechoslovakia as well as for joint co-operation in electronics in third country projects will further step up our export trade. A seven member Commerce Ministry team is visiting the US to explore the expansion of engineering exports to that country including sub-contracts from US engineering firms for turn key projects in Asia and Africa. The Union ministry of Heavy Industry is also providing a number of facilities such as licenses from preferred sources, enhanced import entitlements, letters of authority for direct imports and preference in steel purchases from the stockyards at JAC price etc. as a means of expanding engineering exports. Finally Plans are underway to broad base the organisation of shipping units and councils and improve their functioning in order to increase and accelerate our exports. One particular area where United shippers and customers voice is needed is the abolition of the Suez canal's surcharge which is still being levied (see Vol V p. 398)

Aid: In September, India and Japan signed an agreement on a project lone of 10.9 million yen (Rs. 31.41 crores) to meet the foreign exchange costs of Bhatinda and Panipat fertiliser project. The loan, which supplements the earlier 1973-75 loan of 22 million yen, is repayable in 25 years, with a 7 year grace and 4 per cent interest.

International:

Bangla Desh: Bangla Desh's National Economic Council was reconstituted at the end of August and its first action was to approve a taka 3,160 million fertiliser project at Ashuganj with a 5,28,000 tonnes annual capacity. Bangla Desh has agreed to supply India 10,000 tonnes of newsprint annually for 3 years from 1967, in addition to the 70,000 tonnes supplied. The problem now is the relative glut of newsprint in the country. STC is carrying 35,000 tonnes of stock valued at Rs. 14 crores. Bangla Desh sold 4,000 tonnes jute to China in September, thus diversifying further its export market for jute.

Pakistan: By September Pakistan has sold 70,000 bales of raw cotton out of the 2,00,000 bales agreed to (see Vol V p. 210). The reverse trade of India's exports of engineering goods, iron-ore, railway equipment and jute production are still under consideration.

World Monetary Reform: September saw the important annual meetings of IMF and IBRD with little further movement towards the reformed world monetary system needed and expected of IMF. The major agreement at the Washington meeting was the decision to allow IMF to sell a part of its gold to aid developing nations as follows: (a) IMF will return 1/6 of its gold to its members: (b) another 1/6 (250 million ounces = $ 4,000 millions) will be sold at the free market price for aiding the developing countries: (c) th industrialised countries will peg the free market price of gold, and they and the Fund will not increase their gold supplies by purchase in the free market: (d) central banks will later agree on how to use their gold holdings: and (e) the revised articles of agreement will abolish any official price of gold and end its central role in the monetary system. This is a gain and gold now is dethroned and should not cause monetary distortions. But there are possibilities of the industrialised countries now using their greately increased liquidity to push forward their interests, with no IMF restraints on gold prices and gold policies that will follow. The decision on freeing gold is essentially of benefit to the industrialised countries who have the major gold stock in the world. In a sense this was a group 10 (the affluent countries) decision made prior to the IMF meeting. The 1/6 allocation to the poor countries does not compensate them for the lack of decision on linking SDRs to development assistance. A second decision was the redistribution of voting rights under which US's voting is reduced from 20.84 per cent to 20 per cent (and its counterpart requiring a vote of 80 per cent on every decision), and the agreement among the group of 10 on their shares of the IMF's planned 33 per cent increase in quotas, which would provide the Fund with an additional $ 11,500 millions. On this basis the individual countries' quotas (raising the quotas of OPEC countries) are to be determined. On the question of exchange rates, as basic differences persisted between the US which wants a system of floating and France which wants a system of fixed rates, no agreement was reached. Also the oil facility will now end in December 1975, but as the creation of $ 4 billion trust fund through the sale of gold will take

sometime, some interim arrangements for continuing the facility into 1976 through contributions from industrialised and OPEC countries will have to be devised by the Interim Committee of the Fund when it meets in Jamaica in 1976. The result of these decisions was a fall in the price of gold in the European bullion markets from $ 160 - $ 170 per ounce to $ 150-$ 155 per ounce in early September and by end of September a further decline to $ 128-$ 129 per ounce. The US dollar on the other hand rose, plunging the pound sterling to a low $ 2.0367 at the end of September, gradually reaching what is described as the 2 dollar pound. In September, South Africa devalued its rand by 17.9 per cent, so that one rand exchanged at $ 1.15 against the previous $ 1.40 and Israel devalued its pound by 7 per cent, at 7 Israeli pounds to the U.S. dollar, instead of the earlier 6.36 pounds.

New International Economic Order: The Seventh special session of the UN General Assembly meeting in September to decide on the New International Economic Order established the following decisions with strong reservations from the United States. (a) The developed countries should fulfil their ODA pledge of 0.7 per cent of their GNP by the end of the decade (originally it was to be by 1975 but now it stands at a little over 0.3 per cent), (b) the link between SDRs and development assistance should be established as part of the world monetary reform, (c) UNCTAD should make a study and present a plan for indexation of exports from the third world countries, and (d) for a legal code of conduct governing transfer of advanced technology, (e) a compensatory financing facility should be operated by the IMF which will cover not only commodities but all export items including manufactures and the possibility of converting loans into grants, (f) the development of co-operation among developing countries in natural resources, technology and trade, (g) flow of concessional financial resources to the developing countries and the untying of the real resources transfers to assist them in the implementation of their long-term programmes of economic and social development, (h) the establishment of a trust fund to be financed partly through IMF gold sales and partly through contribution, and to be governed by an appropriate body for the benefit of developing countries, (i) the redeployment of industry in the third world, (j) the easing of the debt burden of the developing countries, and (k) an international fund for agricultural development to be set up by the end of the year with an initial $ 1 billion plus a world foodgrain reserve. The resolution and the accompanying document were adopted without dissent. But the US expressed reservation on the very concept of a new international economic order, and reservations on the 0.7 per cent aid target, the SDR development assistance link, the indexation study and the transfer of technology commitment. The EEC and Canada, while accepting the 0.7 per cent target stated that they did not have the means to implement it. This was a historic session. The New International Economic Order, which is an order in which the developing world is for the first time deciding and has a decisive voice, is born; their actual gains in this round were on marginal and soft issues, the hard issues of trade and monetary reform have still to be fought out and that is what the New Order will be—one of continuous battle for the rights embodied in the document now adopted.

World economy and Aid: The President of the World Bank once more in his annual report presented a profile of world poverty (a decline of 0.5 per cent in per

capita incomes in 1974), aggravated by high import costs, the prolonged recession in the industrialised world and the declining international trade trends. At the current rate of demographic growth, the third world countries will need $ 49 billion of external assistance to stay where they are, and $ 61 billion for a per capita growth rate of 3.2 per annum. The parlous position of the poverty sector and the Second Development Decade is given in the following table which is far away from the 6 per cent GDP growth target:

Growth rates	Average 1969-73	1974	1975	1976-80 Case I	1976-80 Case II
Low income countries (1 billion people)	0.5 %	—0.5 %	—0.7 %	1.2 %	3.2 %
Middle income countries (725 million people)	4.5 %	3.9 %	—1.2 %	2.8 %	3.8 %

Case I is of $ 49 billion aid flows, and Case II is $ 61 billion. Even so, it is a bleak prospect. Within each country the problem of the over crowed cities with their hungry migrant populations and the growing dimensions of rural poverty call for production oriented urban and rural programmes using labour intensive techniques, without sacrificing the advantages of capital intensiveness where it is necessary. On top of their poverty problem, the non-oil producing developing countries face this year a current account deficit of $ 50 billion (with the 10 per cent rise in crude prices from October 1, this would be nearer $ 55 billion). Against this general background, the world aid decisions in September include the setting up of the IMF Trust Fund out of the gold sales proceeds, the launching of the World Bank's third window with a $ 1 billion target, the fifth replenishment of IDA on which negotiations which must take place in the next 2 months at a probable level of $ 9 billion, which is double the fourth replenishment level, the offer by Sweden to cancel the debts of the poorest and the most seriously affected developing countries as advocated by the Commonwealth expert group (see Vol V p. 406), followed by Canada's and Sweden's decision to make all future aid in the form of grants and the decision to set up the Agricultural Fund. On the negative side there was no movement on using trade as a means of helping the development of the Third World, and specifically the IMF Managing Director's call to US, Japan and West Germany, which have virtually offset their oil related deficits and are the 3 richest countries, to take a leading role in combating the international recession by adopting expansionary policies was rejected by the 3 countries. Putting the blame for world recession and inflation on high oil prices alone, as the US Treasury Secretary did, just led to a confrontation and diverted attention from the urgent practical means of aiding the development of the Third World, which is what the UN system including IMF and World Bank are for.

OPEC: OPEC's decision to raise crude prices by 10 per cent from January 1 has been referred to earlier: The World Bank's estimate that OPEC monetary surpluses will reach $ 4,03,100 million by 1980 (see Vol IV p. 680), OPEC points out,

must take into account that the major part of the surpluses are held by 3 out of 13 countries, Saudi Arabia, Kuwait and the United Arab Emirates, which between them have a population of only 6 million which is 2 per cent of OPEC's total population. The World Bank estimate is that these 3 countries will hold $ 3,47,700 millions by 1980 which is 86 per cent of the surpluses. The issue is quite complex with many members of OPEC importing more than their oil revenues. Iran imports in the first 4 months of the current year amount to 248.3 billion riyals and its petroleum exports during this period were 12.6 billion riyals, leading it to by $ 350 million World Bank 8 per cent bonds. Indonesia is seeking $ 575 millions external loans, Iraq $ 500 millions and Algeria a similar amount. Moreover there has been the recycling of petroleum dollars in the Euro dollar markets. As a result, OECD countries trade deficit will drop from $ 34 billion in 1974 and $ 15 billion in 1975 and the monetary surplus of OPEC will decrease from $ 67 billions in 1974 to $ 25 billions in 1985. As noted earlier, given the varying import capacity of OPEC countries, Saudi Arabia reserves have risen from $ 11.6 billion SDRs to 16.4 billion SDRs between December 1974 and May 1975, while Iran's rose from 6.8 billion SDRs to 7.7 billion SDRs and Venezuela's from 5.3 billion SDRs to 6.6 billion SDRs. The reserves of the other countries actually declined. This explains the differing position taken at the September OPEC meeting on the crude price rise—with Saudi Arabia being against any rise, and Iran, Iraq, Libya, Algeria and Nigeria in the forefront for a sharp rise. The 10 per cent rise decided will involve payment of additional $ 10 billion by Europe and Japan, including adding $ 4 billion to EEC's balance of payment account. For US it will add $ 2.5 billion per year to its energy payment bill and £ 3.50 millions to UK's trade deficit.

Ore Exporters Association: 3 more countries—Sierra Leone, Tunisia and Peru—signed the agreement for the Association of Iron Ore Exporting countries in September. Peru was the seventh country which signed on September 12 and 30 days after the seventh signatory, the agreement came into force. The first session of the conference of ministers, who now account for 80 per cent of world ore exports, will meet in London on October 23 and 24 under the Chairmanship of the Indian Minister of Commerce.

World Food; FAO estimates the 1974 world paddy crop available for consumption and trade in 1975 at 321 million tonnes, which is 2.6 million tonnes short of the 1973 record, mainly due to production shortfalls in India, Bangla Desh, Burma, Thailand and Pakistan. As a result of drought conditions, importing countries had a reduced production by 5 million tonnes, while exporting countries increased theirs by 3 million tonnes. US, Burma, Egypt, Argentina and Colombia had export surpluses so that rice prices fall from 392 points in 1974 to 305 in 1975. World cocoa production which now stands at 1.5 million tonnes in 1974-75 will increase to 1.79 million tonnes in 1979-80 and to 2.3 million tonnes in 1984-85, with a general pointer to the need to develop new markets. ESCAP has prepared a 3 year plan outline for Inter Asian co-operation to increase food production and promote agricultural development. The plan outline calls for (a) improved farm policies, (b) new approaches to regional co-operation, (c) more use of the region's available lands for coarse grains, (d) more attention to the small farmer, and (e) measures to improve production, distribution and

marketing of fertilisers, organic manure and pesticides. On the base of the guidelines for projects for 1978-1981, ESCAP will present a detailed plan to the Commission's March 1976 meeting. The United Nations University in Tokyo has taken as its first and priority study theme the problems of world hunger. International experts, meeting in Tokyo, helped the university identify the areas that will provide practical solutions to world hunger problems, the development, adaptation and transfer of appropriate food technologies that will reduce post harvest losses, development of new consumer acceptable foods and the designing and monitoring of the nutritional status of the vulnerable sections of society. The University will next turn to the problem of human and social development.

II Agricultural Development

Paddy :

Kuruvai harvest in the State got underway from the middle of September in Thanjavur and other districts. In Thanjavur district, some production records were registered. ADT-31 produced 3 tonnes per acre in Poongulur in Nannilam block and Asesham village in Mannargudi block and 2.3 to 2.6 tonnes per acre in Kumbakonam taluk. Karuna yielded 2.5 to 3 tonnes per acre. In 4,72,399 acres Kuruvai was being harvested, thaladi planted in 4,253 acres (out of 3 lakh acres) and samba over 1,79,700 acres (out of 7 lakh acres). The co-operative societies report disbursement of Rs. 16.07 crores for the kuruvai and samba crops upto mid September, Rs. 9.93 crores being in cash and the rest in kind. From early October, PWD is operating the turn system, releasing water in Vennar system from October 2 to 5 and from then Cauvery releases will be at 8,000 cusecs per day till January. The government has agreed to procure 5 lakh tonnes of rice against the APC recommendation of 6 lakh tonnes. From the present short-term kuruvai, it will procure 3 lakh tonnes, of which 2.5 lakh tonnes will be from Thanjavur district. On the 70 lakh acres of cultivable and sown areas, the official forecast is that the target of 80.60 lakh tonnes of food grains, including 61 lakh tonnes of rice will be attained. The entire marketable surplus is being purchased in Thanjavur district by the 650 CSD and FCI purchase centres and 20 mobile centres. In addition 105 storage points in the district have been set up and moisture content upto 18 per cent is allowed in purchases (against last year's 15 per cent). In other districts there is to be levy procurement and in Tirunelveli district, Wallajah, Arcot, Arkonam, Cheyyar, Arni, Chengam, Tiruvannamalai, Polur, Wandiwash in North Arcot district and Chingleput district except Saidapet taluk and Avadi township, all purchases are to be made by government. The prices fixed after consultation with Union government and taking into consideration

APC recommendations and local conditions, are : for Thanjavur district slightly higher prices ; coarse Rs. 90 per quintal, medium Rs. 95, fine Rs. 100 and super fine Rs. 105 plus for those who will deliver the paddy at the Civil Supply Department (CSD) and FCI centres Rs. 2 per quintal for transport costs and for those who deliver at storage points Rs. 2.35. In Thanjavur all purchases are to be by CSD and FCI with no private purchases. In other districts allowing for Rs. 5 transport costs and Rs. 10 per quintal bonus, the prices per quintal fixed are: coarse Rs. 89, medium Rs. 93, fine 95 and super fine Rs. 98. As noted in the last issue (p. 534) prices in Thanjavur have been declining - Rs. 1.50 - Rs. 1.70 per kg. for boiled rice and Rs. 1.80 - Rs. 2.16 per kg. for raw rice.

Other agricultural development measures :

As forecast in the last issue (p. 534), the Chief Minister opened on September 7 the first 164 acres State Farm at Musaravakkam. This is part of a plan to bringing under irrigated crops, 60,000 acres of cultivable waste land within the next 18 months. The State Farms Corporation will be using polythene sheets in the sub soil to conserve moisture in loose sandy soil farms. 10,000 acres out of 15,000 acres of the Kudiraimuzhitheri farm in Tiruchendur taluk will be reclaimed by bull dozers removing one foot of soil and laying the high density polythene sheets which will be covered with good soil and planted with crops at a cost of Rs. 3,000 per acre. The Corporation is taking up 300 acres of Thanjavur temple lands and 657 acres in Pudukkottai for cultivation. Another area demanding attention in the State and country is crop protection. At present the country loses Rs. 5,000 crores which is 20 per cent of its agricultural produce, of which 33 per cent is from weeds, 26 per cent from plant diseases and the rest from rats as noted earlier. Rs. 1,900 crores are estimated to be lost in wheat and rice, Rs. 350 crores in groundnuts, Rs. 90 crores each in oil seeds and cotton, Rs. 284 crores in sugarcane, Rs. 30 crores in potatoes, Rs. 77 crores in tea, Rs. 200 crores in fruits. Hence an imroved system of pest control is being launched on the basis of consultations organised by the ICAR in New Delhi in September.

Research Results :

Research on pest resistant bajra by the Punjab Agricultural University has resulted in 2 hybrid varieties, PHB 10 and PHB 14, which are both resistant to downy mildew and ergot diseases. They are also like all bajra varieties cultivable under extreme dry conditions which can be of particular value to the dry areas in this State. Another useful result is the testing of 47 varieties of soyabeans as a follow up of HYV paddy. The Tirupathi Agricultural College has worked out agronomic schedules for the selected varieties, including sowing, rhizobial culture etc., which can be used in this State. In areas like Coimbatore, Wynaad and Nilgiris, vegetable soyabean which has been developed in 8 varieties by the GB Pantnagar Agricultural Universty can be grown. This is a 70-80 day crop yielding 75-130 quintals per acre. On cotton, to regulate the excessive growth of its vegetation which would affect the boll formation, the use of a growth regulant developed by the All India Medical Corporation has kept such vegetation growth down in the case of MCU-5 and Varalakshmi. Trials in Coimbatore have demonstrated that spraying the regulant on the 90th day continues plant growth and yields more bolls. Again the Punjab Agricultural University has developed an electronic instrument to test the chemical and other

element in soils and plants. On this basis, periodic surveys are made of the villages to identify the strength and weaknesses of the soils. In fact the University runs a health check for farmer's crops at a small fee of Rs. 5, a facility which should be provided to our farmers by TNAU. The State has made effective use of the package banana programme, according to a Union government's team survey. Around 45,000 acres are under banana cultivation in the State with an annual production of 7 lakh tonnes. But to meet the internal demands (the common man's fruit) and the expanding export market, the target is to increase the production to 20 lakh tonnes, which is 40 times the present production. It is here that package scheme is important. Started in 1967 over 2,000 acres, it now covers 35,000 acres including 15,000 acres for export. Starting from 425 quintals per hectare, there has been an increase of 11-17 percent with in 5 years. Here again the banana top disease needs to be controlled and the growing market in West Asia and the gulf countries taken advantage of. Finally attention is called to a low cost tractor especially suited for dry lands devised by a UK agricultural engineering college. It has 3 times the pull of a pair of oxen and digs the soil deep and evenly and is labour intensive. It can plough, weed and carry a harvest load. Above all, it can be fabricated locally and is within the means of the medium farmer.

Dairy farming :

The participation of the State in the 25 integrated farm and dairy development projects with collaboration in the case of four projects with UK, Canada, Bulgaria, New Zealand is being planned and developed. The Tamil Nadu Dairy Development Corporation has acquired 2 rail milk tankers with a capacity of 40,000 litres each to transport milk from Erode to Madras. From the 35,000 litres per day being transported by road, the amount will increase to 60,000 litres; and the number of milk producing societies in Salem will increase from 70 to 120. In fact the weekly prize distribution rewarding quality milk boosted milk production in rural areas. In Namakkal alone 12,000 litres are being collected, calling for a second 20,000 litres chilling plant.

Coffee :

Coffee production is doing well as noted in the last 2 issues. From 60,000 tonnes in the sixties it is now nearly 1 lakh tonnes. Of the 3.6 lakh acres under coffee in the country, 62 per cent is in Karnataka, 21 per cent in Kerala, 16 per cent in Tamil Nadu and one per cent in other States. Both the Coffee Board and the Union goverment are pushing coffee cultivation in new areas—Andha Pradesh, Orissa and Assam. The Coffee Board estimates that this year's exports will be 60,000 tonnes but points out that because of the current price trend, 20, 000 will be sold at the cost of production, another 20, 000 below costs and only 20,000 above the costs involved. The current boom in coffee prices refers only to this last element, of which half has been sold. As against 55,793 tonnes exported out of the 91, 321 tonnes 1974-75 crop, it is expected that in 1975-76, 57,000 will be exported yielding Rs. 60 crores. One line that is being further developed is instant coffee, of which only 250 tonnes were exported to East Europe last year. Now the Board is encouraging Nestles and Brook Bond, with a capacity to produce 1,000 tonnes each, but producing only 1,200 tonnes as that was the internal demand, to use their unused capacity of 800 tonnes to produce for export. Here the problem is that our instant coffee is double the price of that of the other countries' brands. There is need to experiment with use of low grade coffee and improve and

cheapen our roasting technique. The Union govement's enquiry team into the cost of production of coffee plantations has completed its work in the 3 States and is now visiting the various centres before finalising their report and submitting it to the goverment.

Tea :

Tea production in the first seven months of 1975 was 216 million kgs. compared to 225 million kgs. during the correspon-ding period of 1974, due mainly to drought conditions in the North Indian gardens, as pointed out in the last 2 issues (see Vol V pp. 474 and 536). Tamil Nadu's production increased to 55.1 million kg. in 1974 compared to 54.1 million kg. in 1973. It also attained the highest per hectare acreage yield in the country at 1,550 kg. For the country tea export earnings went up. During April-June 1975, 34 million kg. were exported and earned Rs. 39 crores compared 42 million kg. earning Rs. 35 crores in the first quarter of the last financial year. The unit realisation was thus higher this year at Rs. 11.45 per kg. compared to Rs. 8.32 per kg. last year. If this price trend is kept up even if the 1975-76, exports are 210 million kg. compared to the 218 million kg. in 1974-75, the export earning this year will be Rs. 235 crores against last year's Rs. 215 crores, which was itself Rs. 70 crores above the 1973-74 earnings. The higher earning this year are due to higher level of packet tea exports and prompter deliveries to the markets around the Mediterranean and the Black sea due to reopening of the Suez Canal. There is to be a doubling of export of packet tea from 5 million kg. worth at 7 crores in 1974-75 to 10 million kg. worth Rs. 15 crores in 1975-76. The Tea Trading Corporation has been exporting South Indian packaged tea from the Cochin auction to meet the Rs. 2.5 crores orders from Afghanistan and Poland. This will give consumers a wide choice of South Indian and as well as North Indian Teas. But what is really needed is higher production and producti-vity for improved realisation of export earnings and for this a study of consumer preference in foreign markets, production of larger quantities of instant tea and packaged tea, reform of the system of auctioning and marketing, and closer co-operation between producing count-ries and the desideratum. The Union government's offer to examine the ques-tion of depreciation allowance for planta-tion crops and full excise rebate for exports "in depth and expedition" will then constitute a useful incentive to higher levels of productivity. The government has also emphasised the importance of labour participation in ownership of plantations, and has called attention to the viability of small planters as in Japan and Keyna.

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III Industrial Development

Salem Steel :

The expert committee to study the Dastur Project report completed its detailed review of the report in September and the next stage is to follow closely the time schedule recommended. The Rs. 10 crores so far spent on the plant has helped in preparing the infrastructure including the Pulampatti site from where the Cauvery water will be supplied to the plant. The work on the railway siding and roads is also nearing completion. Now the Union goverment must find the resources to get on with the first stage of the plant.

Neyveli :

Neyveli is currently producing 3.5 million tonnes of lignite with existing equipment, all of which is needed for the thermal plant, where 2 units have been converted to oil firing despite the higher costs involved to meet the State's desperate need for energy. The Union government has taken a further step to help Neyveli by allocating to it Rs. 12.57 crores to convert its fertiliser feed stock from lignite to oil. This is a move in the reverse direction to economising on the use of crude and is the result of the trade off analysis under which the current annual loss of Rs. 5 crores of the fertiliser plant has to be offset by the cost of the feed stock switchover. The foreign exchange cost of the switchover is Rs. 4.75 crores, which will take around 30 months, including a 6 weeks shut down. As a result, urea production which this year will be 40,000 tonnes will be raised to 60,000 tonnes. In regard to the expansion of lignite production, the Corporation has placed a Rs. 24 crores order with Elecon Engineering of Gujarat for the supply of material handling equipment for the mine. The conveyor system ordered consists of 15 km. of 1,800 to 2,000 km. wide belt which will operate at 42 metres per second. The system will be installed in 40 months and will work in conjunction with the bucket wheel excavators and spreaders which are being supplied by West German suppliers (see Vol V pp. 412-413).

Kalpakkam :

Kalpakkam's reactor vessel which is the heart of the nuclear power station was fabricated and handed over by Larsen and Toubro at its Powai works, Poona to the Atomic Energy Commission. It is the second calendria to be manufactured in India (the first was for Unit II of the Rajasthan station). It has been moved to Bombay from where it will arrive by sea to Madras to be then transported to Kalpakkam.

BHEL :

BHEL's performance (Tiruchi unit) highlighted by the Union minister of Heavy Industry and Civil Supplies is that its investment is Rs. 32 crores and its production target for this year is Rs. 130 crores, an investment-production ratio of 1:4. This is a good record and the BHEL units have decided to increase their 1975-76 production target from Rs. 380 crores to Rs. 418 crores (in response to the call to increase targets by 10 per cent). In September, HMT handed over the 2,000 tonnes hydraulic press manufactured for BHEL, Tiruchi to support its expansion from 750 MW to 2,500 MW. The press will manufacture dished ends, eils, tees,

plate formed pipes and do not bonds for its boilers. Apart from being a major technological break through achieved by HMT in designing and fabricating this sophisticated, very heavy duty technological press, this HMT equipment saves the country $ 1 million in imports and will cater to a Rs. 3.5 crores domestic market. With the installation of the press, Tiruchi, BHEL will itself save about Rs. 17 lakhs of annual foreign exchange outgo. With this background, the advice given by BHEL to the Union government not to import any 500 MW set and not to allow the World Bank to make this a *condition* for its financing the super thermal plants is sound. For one thing, the super thermal plants whether of 1,000 MW or 2,000 MW can be operated by a group of 200 MW sets which BHEL can speedily supply. It wishes to thoroughly master the 200 MW set technique which it has, before moving to 500 MW. If the government decided on installing 500 MW, Tiruchi BHEL can manufacture them in about half the time it will take to import and install the machine. As a matter of fact Tiruchi BHEL with its technical collaboration with US combustion engineering is already in a position to manufacture the boiler for 500 MW sets. It is now entering into other collaboration arrangements to manufacture turbo generators and other equipment needed for 500 MW sets. When this is done, BHEL will be able to manufacture 500 MW sets within 2 years from the date of the placement of the orders and could be commissioned within the following year, so that it could become operational by 1978 December. If the set is to be imported, one year will be needed to prepare and circulate the detailed specifications to prospective suppliers and float a tender, World Bank negotiations will have to be completed, 33 months will be needed for the foreign manufacturer to execute the order, and another year atleast for shipping, transporting to the project site etc.—which is a total of 5 years. Thus both from the point of using our well developed technology at Tiruchi, BHEL and the time delay involved, when we do go in for 500 MW sets, it should be on the basis of using BHEL's expertises.

Hindustan Teleprinters :

Hindustan teleprinters is now working to full capacity, is meeting the entire domestic demand for teleprinters and has deversified its operations to produce computer periferals, power cubicles, stamp cancelling machines and regenerating repeaters. It is also producing electric typewriters which by the end of the Fifth Plan will be 4,000 units per annum. To meet the overseas demand for electronic teleprinters and improved varieties of the electro-mechanical model that HTL's former collaborator, Olivetti is producing and supplying to the West Asian and other foreign markets, Hindustan teleprinters has through its R and D unit produced an electronic typewriter prototype which has been successfully tested and whose commercial production will begin in 1977. It has also produced an improved version of the TP model and this too will be commercially produced from that date. The overseas market which has a growing demand for these sophisticated machines will then be supplied by HTL.

Sugar :

Tamil Nadu sugar mills are facing a serious problem. The credit squeeze and the reduced levy price for Tamil Nadu referred to in the last issue p. 540 will result in a loss of Rs. 5 crores this year to the private sector mills, according to their statements and lead to a serious reduction in sugar production next year. Their cane cess arrears as Rs. 1.2 crores, and the areas to cane growers amount to

Rs. 1.95 crores. Of the 16 factories in the State, 4 are reported to have not paid the State government recommended price, though they have paid the statutory minimum price. There is also the problem of the 5 sugar mills which have expanded their production but which are caught in the credit squeeze. Their complaint is that the levy prices for the State have been fixed on wrong calculations as to free market realisations and the new levy price is based on the actual price paid to the cane growers to whom another Rs. 8 or 9 have to be paid according to the Bhargava Commission recommendation. One result is large scale diversion of cane production to paddy and commercial crops like turmeric and also of cane to jaggery, whose price is not controlled. In fact industry circles forecast a net reduction of 35 per cent of cane to the sugar mills during the next crushing season, and sugar production which is 4.8 lakh tonnes this year will decline to 2.75 lakh tonnes, placing in the red the mills which have gone in for expansion. This situation needs to be investigated by the State government and MIDS has a report for the government indicating possible lines of action. As noted in the last issue (p. 539), the Chief Minister laid the foundation stone for first of the 8 public sector sugar mills in Thanjavur on September 12. The Tamil Nadu Sugar Corporation (TASCO) which will set up all 8 mills has been established for this purpose because of the long gestation period of 63 months which TASCO plans to to reduce to 30 to 36 months. With the share capital contributed by the government, machinery orders can be placed well in advance. The license for the Thanjavur mill was reviewed in May 1975 and TASCO plans to commission it in May 1977. Similarly TASCO has licenses to set up mills in Sankarankoil, Perambalur and Sivaganga and will receive one for Tirukovilur. The inter action between the factories and cane growers enables the factories to supply the growers with fertilisers and seed and transport their cane to the factories which can emerge as growth centres for the area. Some of the private sector mills like Sakthi Sugars have a similar good record and their expertise should not be lost in the present crisis situation.

Calcrete, Envelope making and Animal Feed Plant :

The State Housing Board's Rs. 3.6 crore calcrete plant at Ennore (see Vol I No. 7 p. 10) which is now producing 100 cubic metres a day against a capacity of 150 cubic metres is being restructured to produce 300 cubic metres a day by working 2 shifts. This would turn the loss todate of Rs. 30 lakhs into a profit. Also the price is being lowered and a lower price of Rs. 120 per cubic metre is being charged for calcrete used for wall panelling and Rs. 160 per tonne for roof panelling against the previous uniform price of Rs. 185 per cubic metre. This would also save around 4 per cent in house construction costs if calcrete is used. A small envelope manufacturing unit was started in September at Ayodhyakuppam which is to be extended to book binding and manufacture of leather covers for transistor radios etc. It is essentially an employment generation project. Also in Ambattur in September Godrej Soaps commissioned a 120 tonnes per day new compound animal feed plant which can feed 25,000 cattle or 10 lakh birds. The plant cost Rs. 65 lakhs, uses indigenous machinery and will produce diversified, pelletised animal feed. On this basis it is planned to set up a massive solvent extraction unit at a cost of Rs. 1.25 crores to produce

Rs. 10 crores of protein feed, mainly for export.

Textiles :

90 per cent of controlled cloth produced by the Southern mills have been lifted. 32 mills during the 6 months ending August produced 9,300 bales of long cloth, 1,400 bales shirting, 1,900 bales dhoties and 29 bales drills. The Madras branch of the National Co-operative Consumers' Federation has been lifting and distributing this controlled cloth, and its manager points out that the production of the different qualities is not in the right proportion, there is too much bleached or grey long cloth which are not in demand. It was agreed by all that there should be a periodical review of the distribution developments and there should be a production plan based on the demand pattern and consumer preference.

Handloom :

The State government has under consideration enacting legislatian at the next session to take over 50 per cent of the yarn produced by 206 mills to be sold to the handloom section at a low price, along with reservation of certain varieties of cloth like sarees, dhoties, towels for the handloom sector. In September, there was a 2 day meeting of the Southern handloom ministers at Trivandrum at which the problems of raw materials, production, improving and marketing of the 1/3 of 36 lakh handlooms in the country and also accounting for 50 per cent of the Rs. 100 crores of handloom export of the country were reviewed. Not much headway was made at this meeting, and the State government should proceed with its legislative plans. There was reiteration of the plan to set up handloom production development centres comprising 5,000 to 10,000 looms, including 50 export production centres. In August increased export orders came in brightening the handloom front. If the lack of uniformity in quality and non-compliance with delivering schedules are corrected, with the incentive scheme operating, the year's target of Rs. 105 crores of exports can be attained or nearly attained. The only outcome of the Trivandrum meeting was the dicision to request all handloom producing States to submit within one month, export oriented and intensive development schemes around with a conference of ministers of all handloom producing States is to be held to prepare specific projects. The Tamil Nadu Weavers Federation called in September for an all India Handloom Corporation to operate the standard cloth scheme in the decentralized sector. It emphasised the need for restructuring the handloom co-operatives, setting up production centres and housing colonies financed by the cess fund and schemes for training cadres for the societies among the weavers.

Leather :

The government announced in September the establishment of a functional industrial estate for manufacturing leather goods to be located in North Arcot District. Small farmers who have been affected by the quota system will be able to use this facility. Also if the Leather Development Corporation is not established in Madras, the State will start its own Corporation. The government is also planning to start a leather servicing centre for the State's tanners, and has applied to STC for sharing in the leather exports commission to help finance the centre.

Private sector reports :

The Annual report of Seshasayee Paper and Boards for the year ending 31 March

1975 records a slowdown in production at 29,729 tonnes against the previous year's 32,245 due to the power cut and labour unrest. Total sales, however, rose to Rs. 1,331 lakhs (Rs. 981 lakhs the previous year) due to inflation. The present fall in paper prices is discribed as a slump, which is wrong. The medium and long term plan of the company is related to the Forest Department's development and reforestation plan, with which the company should be associated. The annual report of Mettur Chemical and Industrial Corporation for the year ending March 31, 1975 also shows a lower total production at 25,919 tonnes of caustic soda compared to the previous year's 27,938, attributed to the severe power cut. Only for 3 months in the year was there normal power supply. The other products, bleaching powder, inorganic chemicals, vanaspathi chloromethanes all did better, however, than in the previous year. Sales increased by 26.78 per cent to Rs. 9.23 crores and net profits rose to Rs. 27.17 lakhs. It was a good financial year for the company. The danger that these reports reveal is that the deceleration in output is hidden by the increased sales turnover due to inflation, with the decreased output itself feeding the fires of inflation. Meenakshi Oil and Protein Extracts with a capacity of 60 lakh tonnes, entered the capital market on September 10 offering 54,000 equity shares of Rs. 10 each and 3,500 RC preference shares of Rs. 100 each. The proceeds will finance the Dharwar plant to extract oil from oil seeds. The plant will have a 9 month gestation period.

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IV Education, Science and Health

Educational Reform :

The State announced in September the scheme and syllabus for the diploma course in teacher education. It is to prepare teachers to acquire the knowledge, attitudes, understanding and skills for teaching pupils in standards I to VIII, along with practical experience for the student teachers in a local community where these values can be tested. Another curricular reform was the introduction of nutrition education in the primary school syllabus by NCERT, together with prepration to introduce it also in the middle school syllabus. Nutrition education is being programmed to create an awareness of the need for adequate nutrition to promote growth, to develop skills to select, prepare, serve, consume, conserve and prepare food scientifically, and to foster desirable attitudes and habits towards food. This is part of the launching of an integrated child development services scheme in the country from October 2, announced by the Union government in mid September pursuant to the resolution on the National Policy for Children adopted by the government on August 22, 1974 and the

National Childrens' Board set up on December 2, 1974 with the Prime Minister as chairman. Under this programme 30 experimental projects are to be located in 30 blocks, each poject at a cost of Rs. 4.79 lakhs in rural, Rs. 5.84 lakhs in urban and Rs. 2.99 lakhs in tribal areas, covering pre-school children and pregnant and nursing mothers. Each project will deliver a package of services covering supplementary, nutritional feeding, immunisation, health check-up, health and nutrition education of mothers, non-formal pre-school education, family planning and protected drinking water. To operate the programme, co-ordination committees of all Departments and Services are being set up at all levels from the village to the Union government, headed by the Secretary, Department of Social Welfare and another committee headed by the Union minister of Education. Of the 228 million children upto 14 years of age, 115 million are pre-school age children.

Non-formal Education :

On September 24, exactly one year after the government's request, the Tamil Nadu Board of Continuing Education released to the Minister of Education the report and the Plan for Non-formal Education in Tamil Nadu under the title, 'Towards a Functional Learning Society.' Chapter I of the report summarises the 134 schemes run by 98 voluntary agencies and 6 Departments of government covering about 6 lakh people. The schemes are classified into (a) general education and training comprising (i) remedial and basic education (25 projects) (ii) orientation courses (3) and (11) general youth education and service programmes (6) (b) occupational training comprising (i) agricultural training (13 projects) (ii) fisheries training (1), (iii) nutrition education (1) (iv) industrial training (26) (v) health training (13), (vi) social welfare training (11), (vii) cottage industries training (9), (viii) commercial education (3) (ix) management training (4) (x)teaching programmes (7) (xi) self-employment training (6) (xii) Bank staff training (1) (xiii) teacher training (1) and (xiv) counselling training (1). On the basis of the schemes, non-formal education is defined as providing learning, being organised, outside the formal educational system, motivating and covering the entire life system. The general description of non-formal education is *"the organised provision of learning* opportunities outside of the formal system, covering a person's life time and programmed to meet a specific need." In Chapter II, the stakes in non-formal education are set forth as being to correct the errors and gaps of the formal system, and provide a flexible system of learning available to all. Chapter III attempts an interim assessment. It lists the gains as being the rapid increase in the schemes since independence, the involvement of the State in non-formal education, the growing involvement of a multitude of non-governmental agencies, the wide coverage of the schemes both in subjects and spatially, their functionality, the low dropout rate, their high employability and low unit costs. The weaknesses include, no State policy on non-formal education, the overlapping of Union and State activities, no percentage allocation of development budgets, imbalances in the programmes, with general education playing a small part, lack of co-ordination of voluntary agencies' efforts, the equation of non-formal education with second class education and gaps in the programme. Chapter IV analyses the programmes and makes recommendations. Under general education it recommends the setting up of a directorate of non-formal education, the conserving of the gains of the tutorial colleges, the co-ordination of the efforts of Nehru Yuvak

Kendra, the Youth Corps and other Youth programmes, making NSS obligatory, indigenising the training content for scouts and guides, rapid expansion of farmers education programmes and industrial training programmes, government financial support to the voluntary Health Service. Chapter V sets forth curriculum guide lines for agricultural workers, industrial workers, women, the urban poor, school dropouts, youth and the values of the community. The concluding hapter recommends that the State government formulate a policy on non-formal education and present it to the Legislature that the non-formal education priorities should be small farmers, small artisans, self-employed, adult illiterates and dropouts, that all non-formal education and training should be legislated, and the Tamil Nadu Board of Continuing Education be the co-ordinating agency for all voluntary agencies in the State. The report ends with a valuable appendix summarising the 134 schemes. The Central Board of Workers Education organised in September a 3 month course for women workers in addition to its ongoing programme for training trade union leadership. It is also to run a one week training programme in November for women members of Unions in the teaching profession, hospitals, telephones exchanges and Indian airlines. On the SITE programme, first reports are that the rural audiences are increasing and that the programmes are popular. But there have been too many fuses and breakdowns in the sets because of the novelty of the equipment and the floods which washed away many sets. The programme material is being slowly developed, the total being 1,200 hours for the year which is equal to the time of our feature films for the year. The programmes had a musical bias as that was desired by tha rural audience, science and children's programmes were local based, social scientists had prepared audience profiles and programmes were pretested and modified by feed back results. The programmes are the result of 2 multidisciplinary teams and have been effective in the science area using the expertise of the Tata Institute of of Fundamental Research, the Homi Bhabha or Vikram Sarabhai Centres. According to UNESCO's Statistical year book for 1975, India is producing one book in every 8 in the world, ranks 8th in the world of publishing. The main publishing and promotional centres are ICSSR, NBT and the Universities.

Technical Education :

The National Students Union is setting up 25,000 model agricultural plots to be farmed by its members. Each plot is about $\frac{1}{4}$ acre and is being launched in every district on September 1. This is part of the effort to make education more vocational and community based.

Science :

NCST was once more reconstructed in September, to comprise 23 members, the heads of all the Scientific agencies and some non - official experts. Having as its Chairman the Deputy Chairman of the Planning Commission, it will be allied to the latter. Two areas for research chosen as a priority because of past neglect are Forestry and Oceanography. It will advise on organisation for S and T, methodology for assessing R and D projects and promote interdisciplinarity between all sciences—natural, engineering and social. In the (NCST) plan, 2,000 scientists are involved. BARC is developing laser research to develop the technology of laser induced thermo nuclear fusion for power production. This will enable sea water to be used as the raw material to produce abundant cheap

energy. The medium energy variable cyclotran at BARC will go into operation later this year, a rather important achievement using entirely Indian technology. Another break through is the transmittal of ECG signals by Aryabhatta from Sriharikota to Bangalore which can help medical work and expedite relief. India's ISRO has concluded an agreement with the Soviet Academy of Sciences to launch a second satellite from a Soviet Cosmodrome using a Soviet rocket carrier in 1977-78. After that ISRO will launch satellites with her own rocket launchers. The Tata Institute of Fundamental Research reports a series of observations by its radio astronomers which supports the theory that the entire universe was contained in a primordial fire ball that exploded 10 to 20,000 million years ago and has been expanding ever since, as against the steady state theory. ISRO and ICAR have succeeded in the first experiment (in Anantapur and Ludhiana) in using remote sensing techniques to survey land and agricultural resources in the 2 districts. The photo interpretation of the collected data has been completed and is helping farm strategy in the 2 districts. The Regional Research Laboratory has designed a solar drier to dry apricots in Ladakh, which imports Rs. 60 lakh of apricots weighing 1,750 tonnes. The drier eliminates all risks of contamination which the traditional method of drying on the ground involves. NCST has proposed for the plan period Rs. 50 crores for research on communicable diseases and viral diseases. Nutrition monitoring, use of common salt and iron, of vitamin A to prevent night blindness, investigation of leafy vegetables and self-sufficiency in drugs particularly those needed for the treatment of common diseases.

Health :

A West Bengal study on abortion throws light on some trends in abortion in the country. There is an observable quantitative increase. In West Bengal, it increased from 2,200 cases in 1972-73 and 3,375 in 1973-74 to 10,000 in 1974-75. Of 484 cases studied, only 45 were single women's, 12 widows and 1 divorced. In contrast, in the U. S. single women's abortion is 70 per cent, and in Sweden and UK 45 and 47 per cent. The reasons for abortion divide between some failure of the family planning method or fear of grave injury to health. Most women who had attained the desired family size were 25 to 34 years old and formed 67.2 per cent of total married acceptors. Also 61 per cent of the married couples accepted tubectonomy after the medical termination of pregnancies (MTP). This means that MTP acts in a sense as family planning inducer and preventer of future child births through tubectonomy. The family planning programme has received a boost from the US-UK medical research discovery of a delivery system of putting the drug right on the target organ without affecting the rest of the body. The minute droplets of the oily compound shoot through the blood stream like a guided missile carrier rocket and unloads its drug cargo just on target. The All India Institute of Medical Sciences in New Delhi has also developed a similar technology of birth control in which a woman inhales small amounts of the contraceptive drug which shoots the drug directly to the gland controlling reproduction.

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V Employment

The June-July issue of CSIR's Technical Manpower Bulletin reports that 61,189 engineers and technologists graduated from 146 technical institutions in 1973. Engineering graduates increased from 1,830 in 1950 to 5,252 by 1960 and to 16,800 in 1973. Between 1970-73 there was a decline of 1,500 due to the reduced admissions in the institutions, in turn due to engineering unemployment. In specialisations, the trend has been upward in the output of electronic and telecommunication engineers from 518 in 1970 to 916 in 1973, as well as in chemical and production industrial engineering. Mining engineering is on a declining curve since 1965. For technologists, 1950 to 1960 saw a near doubling from 235 to 408 and to 903 in 1970. From 1970-73 the increase has been a little over a hundred, which is a large slowing than for engineers. Taking both engineers and technologists, civil engineering has declined from 40 per cent of the total in 1950 to 18.2 in 1973, electrical engineers and technologists increased from 22.7 in 1950 to 24.7 in 1973 and mechanicals expanded fast from 19.7 in 1950 to 32.6 in 1973. Pharmacy graduates were 44.6 per cent of all technologists in 1973, followed by textile and jute technologists. This outturn profile is related to the demand and employment prospects of this group of specialists. On the labour front, the Union government issued on September 25 an ordinance reducing the minimum statutory bonus payable to workers from 8.33 per cent to 4 per cent this year, and from next year losing concerns will not have to pay any bonus. The absolute minimum bonus has been raised from the current Rs. 25 and Rs. 40 to Rs. 60 and Rs. 100 for different classes of low paid workers. The scheme is extended to units employing not less than 10 persons instead of 20 persons as at present. The maximum amount is retained at 20 per cent, except for banks, LIC, ports, and non-competitive public undertakings for whom the maximum is 10 per cent. The concept of bonus is clarified as being payable on the basis of profits or on the basis of production and productivity. Tamil Nadu's 90,000 estate workers are to be paid a bonus of 12.5 per cent this year (Rs. 2 crores) and 10.5 per cent next year (Rs. 1.75 crores) under a tripartite agreement negotiated by the Labour Commissioner. Another ordinance issued in September ensures "equal pay to men and women workers for the same work or work of similar nature". Where there are different rates being paid, from a given date the higher rate should be paid to all. There are also provisions against discrimination in recruitment and employment of women that the equal pay provision may lead to. Another legislative measure under consideration is to promote worker's participation in management as a means of increasing the unit's productivity. Starting at the shopfloor level where worker's councils are to be made obligatory in all units employing 500 or more workers, and which are to deal with safety measures, welfare and health measures to promote efficiency and productivity, there will be representation of workers on the boards of management so that workers are part of the decision making process, and decide on all issues not settled at the shop floor level. The Union Labour ministry reports that there were 500 fatal accidents in industry every year and that as a result of non-fatal industrial accidents over 32 lakh mandays per year are lost. This is an avoidable waste, and should be one of the first areas in which shop floor councils should take corrective action.

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VI Other Items

Educational structure :

The final meeting of the educational structure committee dealing with the application of the 10+2+3 system to the State was held at the end of September. Agreement was reached on the timing of the launching of the new structure, the location and streaming of the 2 year post 10 year school programme, the disaggregation of the 10 year school, the costs involved in adopting the new system, and the implications for the first year of the three year University degree of the new structure. The Committee will be formally presenting its report and recommendations to the government for it to make the decision on adopting the new structure and other consequential decisions by the end of October.

Madras University events :

A meeting of the 15 city college principals with the Vice-chancellor and the syndicate committee was held in early September to plan the UGC Rs. 1 crore scheme for the development of metropolitan colleges. A plan of action with priorities for individual colleges and guidelines for common inter-collegiate facilities programme for the metropolitan area were agreed upon. A meeting of the standing committee of the Academic Council was held in early September to draw up the agenda and arrange the resolutions formulated by members for the consideration of the Council in October. The annual Convocation of the University under the new procedure under which 400 research scholars and prize winners were awarded their diplomas, while the others are to receive their diplomas either in their colleges or in absentia, was held on September 20 at which the Chancellor presided, and the Chief Minister gave the oration. A meeting of Principals/Headmasters of 27 out of the 35 matriculation schools affiliated to the university was held in late September to consider the problems of convertion of the 11 year matriculation school to 10 years, the numbers who wish to plan for a higher secondary section, and the transferral of their affiliation from the University to the Department of school Education, which would arrange to maintain their special features of being fee based, using the English medium, and continuing to be autonomous in developing their syllabus and text books. The monthly meeting of the syndicate was held on the last Saturday in September, it took decisions on the Vice-chancellor's note on the programmes implementing the policies approved at its August session. It has approved a procedure for revaluation of answer papers on the basis of requests from the concerned candidates.

International Literacy Symposium :

To asses the results and plan the next steps in the drive against illiteracy, the 10th anniversary of UNESCO International Conference on literacy held in Teheran in 1966 was made the occasion for the organisation of an International Symposium which brought together 100 education specialists including Paolo Friere, Paul Marc Harri, Deleon, Lizarabaru, Morales, Aziz, Garraudy and others in early September in Persepolis in Iran. The symposium came to the conclusion that there was a very large and growing illiteracy problem facing us in the third world, and that what was lacking and

what was needed is the political will to remove it. Given the will, the symposium laid down the strategy to be followed and the functionality of literacy programme that must be assured.

NIE Lectures:

The 1975 National Institute of Education lectures were delivered by the Director of MIDS at the NCERT auditorium in New Delhi on September 19 and 20 on the theme 'Indian Education in 2001 AD'. The first lecture outlined the profile of Indian society—the demography, the industry and agriculture, the poverty levels and employment in India in 2001. The second lecture then set forth the educational structure which would be largely non-formal, as it would have to accommodate 2-3 times the present numbers enrolled. For that future educational system, the lecture indicated the decisions that must be made now.

Institute of Public Undertakings:

The executive committee of the Institute met in September and drew up a programme of activities for 1976. It was decided that the major event would be a seminar on constraints to fuller and further production and productivity faced by the public sector undertakings. This would be based on some case studies to be undertaken by a consultant employed by the Institute, as well as a questionnaire to be developed by MIDS.

Energy Conservation:

The Indian Institute of Engineers and five other technical organisations arranged a one day seminar in September on Energy Conservation—a timely effort as one week later the 10 per cent hike in OPEC prices were announced. The major conclusion of the seminar was that there should be increased use of our energy resources, coal, animal and human, alongside of increasing switchover from fuel oil to coal, R and D in so called non-conventional sources which are renewable should be pushed. For all this a National Energy Policy and Board are urgently needed.

Mid-year review of the Economy:

The Associated Chamber of Commerce organised a National workshop in Bombay in mid September on a mid-year review of the economy, and invited the Director of MIDS to write the lead paper for the workshop. (The paper appears as the second article in this issue). On the basis of the paper, the workshop concluded that the possibilities of price stability through demand management was near exhausted, there was need for a selective and modest programme of reflation, that excise and corporate taxes should be stabilised for some years to come at the present high level so that capacity utilisation may be increased in industry, and that to avoid further trade imbalance and deficits the rupee should be delinked from the pound and linked to a basket of currencies. It was interesting that 3 months after the paper was written and one week after the workshop's agreement with this proposal, the government announced the delinking of the rupee and basing its exchange rate on a basket of currencies, as noted earlier.

Vice-chancellors' Conference:

A conference of Vice-chancellors was called by the UGC and the ministry of education on September 30 and October 1 in New Delhi to consider and agree upon a programme for implementing the Fifth Plan directives on higher education. The conference in the 2 day deliberations agreed on stabilising existing institutional facilities in higher education except for

backward areas, open up the first degree to all who desire *higher education through* intensive use of non-formal education methods such as enlarged correspondence courses, evening classes, private study, para degree certificates and diplomas to be financed out of the UGC development grant which would on non-formal education relax the matching provisions, provide compensatory coaching to backward students from the development grants made to universities and colleges, upgrade the 3 year first degree course as the first year study programme of the present degree will be pulled on to the 2 year Higher Secondary, give a rural orientation to higher education, promote autonomous colleges, examination reforms and computerisation of evaluation results and expand and improve student participation in NCC, NSS and other development programmes and their amenities. These are in line with package of policies adopted by the Syndicate of the Madras Universities in August. The Prime Minister was present at the conference and lent her support to these decisions.

Non-formal Education Seminar :

A 2 day seminar on Non-formal Education for women was organised in Lady Willingdon College for the 4 Southern States and Pondicherry by the Tamil Nadu Board of Continuing Education and the Indian Adult Education Association. At the seminar, the report on Non-formal Education in Tamil Nadu was released. The main conclusion of the seminar was to launch large and small programmes for women in functional literacy, occupational training, health, family planning and nutrition education and sports and physical education and use the International Women's year to raise resources and obtain government finances for this massive effort.

Tiruchirapalli and Coimbatore Universities :

The Vice-chancellor's visit to Tiruchirapalli where there are 12 colleges and Comibatore where there are 17 colleges was an occasion not only to review the sound academic work of the colleges now affiliated to the Madras University, but also to discuss the establishment of the Universities of Tiruchirapalli and Coimbatore. Principals and management of the colleges met with the Vice-chancellor to review what was involved in the creation of the two Universities, the legal meaning and content of constituent colleges, and their financial implications. There was general agreement that the unitary university was a novel form in the State and that this should be a start at initiating the two new Universities whose scope only time will define. At Tiruchirapalli the new applied science M. Sc. course was inaugurated at the Regional Engineering college, and at Coimbatore the new M.Sc. programme in environmental biology was inaugurated at the Tamil Nadu Agricultural University.

SLBT and WUS :

A meeting of the Southern Universities' Vice-chancellors was held in Madras University at the end of September when the Vice-chancellor, Madras University was elected as Chairman of the Trust and a programme for 1975 consisting of publishing text-books for the minority South Indian languages in the 4 States, another South Indian language edition of the Courrier, publication of children's books and the Union government's English publications for the Southern region, and a training programme for publishers was established. It was also decided to request the 4 State governments to contribute Rs. 15,000 each per annum to the Trust and for the 17 Universities to contri-

bute Rs. 5,000 each. The world University Service Executive Committee met under the Chairmanship of the Vice-chancellor, who is ex-officio Chairman of the Service, and decided to restructure the finances of the service which owes Rs. 1.5 lakh to the government for repayment of its loan for building the WUS centre, and Rs. 1.37 lakh in arrears to the Corporation on the property tax. It was decided to recommend to the General Body meeting in October that the government be requested to transform the loan into a grant and that the expenses for the year be reduced from Rs. 1.6 lakh to Rs. 0.6 lakh in order to pay off a major part of the arrears to the Corporation. This will involve a large reduction in the WUS Centre activities.

School Celebrations :

In September Baines school, Madras, one of the old Matriculation schools in the city, celebrated the opening of a new school block built by private contributions raised by the Principal. The contribution which the school as an innovative and progressive one can make to the educational system in the State was analysed. Also in September the Hindu High School, one of the oldest and educationally outstanding schools, celebrated Teachers Day by honouring 12 of its teachers who had completed over 25 years of service. The prospects before the school in switching over to the 10 year pattern and preparing itself for the 2 year higher secondary were reviewed.

Special seminar :

The fourth session of the special seminar on 'Educational Development in Tamil Nadu' held in the seminar room of the Institute when Mr. Balakrishna Joshi's paper on the 'Role of the Teacher in the Learning Process' was reviewed. It was agreed that (a) the teacher is a facilitator of the learning process, (b) his position today is undermined both by the value changes in society and the absence of equipment of the teacher to meet these changes, and (c) that a programme of teacher updating, refreshment and retraining was necessary to help the teacher to become a learner himself and prepare himself and his students for the future Tamil Nadu and the world that are ahead of him and his charges.

October Seminar :

The October seminar paper, Slum Clearance and Social Change, by Dr. C. M. Abraham, Professor of Sociology, Sri Venkateswara University, Tirupathi, together with a summary of the discussion of the paper on Thursday October 30 under the Chairmanship of Prof. S. Ramanathan, Madras, appears as the first article.

Second Article :

A Paper, Mid-year Review of the Economy, appears as the second article.

1976 Subscription :

Readers are reminded to send in their subscription of Rs.12-00 for 1976 as soon as possible. No separate cards or invoices are being sent unless specially asked for in writing. All free issues for Indian readers are being cancelled after January 15, 1976, and after February 29 for foreigners.

SLUM CLEARANCE AND SOCIAL CHANGE

By

Dr. C. M. ABRAHAM

Tirupati (Andhra Pradesh)

The Urban Revolution and its Consequences :

The affluent countries in the world are experiencing an 'urban revolution' at the present time. "The growth of industrialization affects the direction and nature of urbanization and both in turn affect the growth of modernization. Physical, organizational and financial facilities required to support an expanding industrial sector become concentrated in cities and vast population shifts to urban centres occur as a response to the economic and social stimulus". (Wilbert Moore : 1963). Now all the "have" nations are largely urban and the proportion of urban population to the total population of the following countries will reveal this distinct trend.

STATEMENT SHOWING THE PROPORTION OF URBAN POPULATION TO TOTAL POPULATION IN SOME AFFLUENT COUNTRIES

S.No.	Country	Date of the last census or estimates available	Total Pcpulation (in Million)	Total Urban Population (in Million)	Percentage of Urban Population to Total Population
1.	U.K.	1—7—1968 (E)	48.59	38.32	78.87
2.	Canada	1—6—1966 (C)	20.01	14.72	73.58
3.	France	1—3—1968 (C)	49.75	34.81	69.97
4.	U. S. A.	1—4—1969 (C)	179.32	125.28	69.86
5.	Japan	1—10—1965 (C)	98.27	66.91	68.09
6.	U.S.S.R.	1—7—1969 (E)	240.57	134.35	55.85

(C) after date indicate Census date. (E) indicates estimate date.

Source : Census of India 1971. Provisional Population Totals.

As a result of the increasing trend towards industrialization and urbanization, the affluent nation faces a number of problems such as its over crowded slums and traffic jams, its squalors of polluted air and water, violence, crime, delinquency, prostitution, mental disorders, family instability, drug abuse etc. Slums and blighted areas characterise much of the central areas of most of the affluent cities and they (slums) are emerging faster than the planners can eliminate them by urban development.

The urban population growth in developing countries has been a continually accelerating process. These countries are becoming increasingly more urban with the passage of each decade. From 1940 to 1960 the population of urban areas of 20,000 or more in Latin America increased from 19 to 32 per cent; from 7 to 13 per cent in Africa; from 8 to 14 per cent in South Asia and 13 to 20 per cent in East Asia. Latin America's urban population grew from 25.2 million to 67.8 million; Africa's from 13.8 to 36.4; million; South Asia's from 50.5 to 116.1 million and East Asia's from 81.6 to 160.5 million. These changes signify a doubling or tripling of the urban sector in a 20 year period, a transformation that is part of a world wide expansion of the population proportions in urban environments. (Marshall Clinard 1973). Although urbanization and industrialization are necessary conditions for modernization, the kind of urbanization taking place in many developing countries is characterised by the accelerating growth of few metropolitan cities accompanied by stagnation in the growth of infrastructure which results in slums of the worst type. Thus the developing countries are on the threshold of "massive urban growth" with grave social and political consequences.

The following table shows the population in slums and uncontrolled settlements as a percentage of the population of major cities in selected less developed countries.

POPULATION IN SLUMS AND UNCONTROLLED SETTLEMENTS AS A PERCENTAGE OF THE POPULATION OF MAJOR CITIES IN SELECTED LESS DEVELOPED COUNTRIES

Country	City	Year	City Population	Population in slums and uncontrolled settlements	
				Total	As percentage of city population
Africa					
Senegal	Dakar	1969	5,00,000	1,50,000	30.0
U.R. of Tanzania	Dar-es-Salaam	1967	2,72,000	93,000	34.0
Zambia	Lusaka	1967	1,94,000	53,000	27.0

Country	City	Year	City Population	Population in slums and uncontrolled settlements	
				Total	As percentage of city population
Americas					
Brazil	Rio de Janerio	1947	20,50,000	4,00,000	20.0
		1957	29,40,000	6,50,000	22.0
		1961	33,26,000	9,00,000	27.0
	Bele Horizente	1965	8,72,300	1,19,799	14.0
	Porto Alerge	1962	6,80,000	86,465	13.0
	Recife	1961	7,92,000	3,96,000	50.0
	Brasilia	1962	1,48,000	60,000	41.0
Chile	Santiago	1964	21,84,000	5,46,000	25.0
Colombia	Cali	1964	8,12,810	2,43,840	30.0
	Buenaventura	1964	1,10,660	88,530	80.0
Ecuador	Guayaquil	1968	7,30,000	3,60,000	49.0
Mexico	Mexico City	1952	23,72,000	3,30,000	14.0
		1966	32,87,334	15,00,000	46.0
Peru	Lima	1957	12,60,729	1,14,000	9.0
		1961	17,15,971	3,60,000	21.0
		1969	28,00,000	10,00,000	36.0
	Arequipa	1957	1,17,208	10,208	9.0
		1961	1,35,358	54,143	40.0
	Chimbote	1957	33,000	6,600	20.0
Venezula	Caracas	1961	13,30,000	2,80,000	21.0
		1964	15,90,000	5,56,000	35.0
	Maracaibo	1966	5,59,000	2,80,000	50.0
	Ciudad Guayana	1966	86,000	34,000	40.0
Asia and Far East					
Afganistan	Kabul	1968	4,75,000	1,00,000	21.0
China	Taipei	1966	13,00,000	3,25,000	25.0
India	Calcutta	1961	67,00,000	22,20,000	33.0
Indonesia	Djarkarta	1961	29,06,000	7,25,000	25.0
Iraq	Baghdad	1965	17,45,000	5,00,000	29.0

Country	City	Year	City Population	Population in slums and uncontrolled settlements	
				Total	As percentage of city population
Malaysia	Kualalampur	1961	4,00,000	1,00,000	25.0
Pakistan	Karachi	1964	22,80,000	7,52,000	33.0
		1968	27,00,000	6,00,000	27.0
Philippines	Manila	1968	Less than 30,00,000	11,00,000	35.0

Source :-Improvements of slums and uncontrolled settlements: Reports of the Inter Regional Seminar on the Improvement of Slums and Uncontrolled Settlements Medellin, Columbia, February. 15-March 1, 1970—New York. United Nations. 1970

Note :- When Census or United Nations figures were not available for citypopulation in the years required to correspond with the data on slums and uncontrolled settlements, figures were derived from the most accurate base data and growth rates. The term 'city population' has generally been taken to include the population of the urban agglomeration.

The table shows clearly the fact that slums constitute the most important and persistent problem of urban areas in developing countries.

The Indian Scene :

An analysis of urban growth in India reveals that during 1970-1971, there has been a tendency towards concentration of population in big cities, and the urban dispersal over the space has been very meagre. Of the additional increase in urban population of 30 million during the 1961-71 decade, 18.84 million or 63 per cent, has gone to class I cities and the remaining 11.02 million or 37 per cent was distributed in towns and cities of other sizes. According to the 1971 census more then half of the country's urban population i.e. 52.41 percent is concentrated in 142 large sized towns having a population of over one lakh. This has been a constant phenomenon in the last two decades and the number of these cities classified as Class I cities has increased from 81 in 1951 to 113 in 1961 and 142 in 1971 and the urban population in these cities corresponded to 41.77 per cent in 1951, 48.37 per cent in 1961 and 52.41 per cent in 1971. The population in 9 largest cities in India comes to nearly 25 per cent of the total population.

POPULATION GROWTH IN METROPOLITAN CITIES DURING 1901 – 1971. ('000)

S. No.	City	1901	1951	1961	1971(1)	Percentage Growth over 1901
1.	Calcutta	933	2,698	2,927	7,031	653.5
2.	Bombay (Greater)	812	2,966	4,152	5.970	635.2
3.	Delhi	214	1,437	2,359	3,647	1,604.2
4.	Madras	541	1,416	1,729	3,169	485.7
5.	Hyderabad	448	1,129	1,251	1,796	300.8
6.	Ahmedabad	185	877	1,206	1,741	841.0
7.	Bangalore	161	789	1,206	1,653	926.7
8.	Kanpur	202	705	971	1,275	531.1
9.	Poona	164	600	600	1,113	578.6

Note :- (1) In 1971 population in respect of all metropolises except Greater Bombay, which correspond to Municipal Corporation area relate to urban agglomeration in 1971; whereas in earlier years the figures relate to town-town groups. The concept of town-town group was made up of independent units not necessarily contiguous to one another, but urban outgrowths have been treated as an integrated urban area, now being called urban agglomeration in 1971 census).

Source :-Town and Country Planning Organization, Census Abstract on Urbanization 1971.

This table reveals the accelerating growth of population in our big cities. During the last 70 years population of Delhi has increased by 1604 per cent, while Bangalore experienced 929 per cent growth and Ahmedabad 841 per cent.

All the major cities in our country are bursting at their seams and all are afflicted with acute problems of slums, inadequate transport and water shortage. Between 25 and 40 per cent of the population of the major cities in India now live in slums which proliferate at an alarming rate. Moreover the expanding throngs of urban dwellers in our midst pose almost gigantic problems.

The Madras Scene:

A historical review of the development of Madras City throws light on the manner in which the slums increased side by side with the development of the city. In 1933 the Corporation of Madras appointed a Special Housing Committee which estimated that the city had 189 slum areas with a total of 15,942 huts. In 1953-54 the Corporation itself conducted a survey and found that there were 306 slums. 57,436 families with a total population of 2,65,000 were in the slums. The 1961 census found that the city had 548 slums having 97,851 households and a population of 4,12,168. Slum population in 1961

accounted for 24 per cent of the total city population. As per the survey of the Planning and Investigation Cell of the Tamil Nadu Slum Clearance Board, there were 1,202 slums in Madras City in 1971 and the slum population was 7,37,531. Thus one in three, lives in slums in the city of Madras which used to be called the "City Beautiful".

The Slums-The Modern Social Malady:

The chilling spectre of the exploding city cannot be dismissed as the cry of a prophet of doom. Some of India's cities provide a foretaste of the discomfort in store two decades from now. Cities like Calcutta, Bombay, Delhi and Madras present the most depressing demographic features because of the fact that they have long exceeded their absorptive capacity. In Calcutta out of some 7,76,000 households, nearly one half reside in slums and pavements. In Bombay one person out of five lives warped by despair and frustration in the plague spots. According to a recent study conducted in Delhi, one family out of five lives in huts and hovels; in temples and gurdwaras; in bus and cattle sheds; under and over bridges and in disused sewers and pipes.

The slums are a big smear on urban society not only in developing countries, but also in developed countries. They reflect the agonizing inhumanities of what man has made of man. They are a blot on our cities and are an affront to human dignity and a threat to all that civilized and democratic societies hold dear. They undermine a democratic system of government. They starve human talent. They trap people and ensnare them in a way of life that in most cases can hardly be called civilized. The slum is the locus of poverty and poverty is one of the potent forces that maintains the vicious circle and makes it so difficult for people to break out. In these poisonous congeries of slums large number of discontented and sullen population live in sub-human conditions and against the facade of skyscrapers and luxuriously furnished flats and homes fitted with the most modern gadgets and equipments. They are wrapped in despair and utter hopelessness and they nurse both real and imaginary grievances and they are like an ammunition dump which could explode at the slightest friction.

The Origin of the word 'Slum' and Definition:

Eric Partridge notes that the origin of the word slum, although obscure, probably comes from 'slumber' since slums were originally "to the majority-unknown, back streets or alleys, wrongly presumed to be sleepy and quiet" (Eric Partridge: 1958). Thus the word 'slum' has long had a negative connotation, has been almost an epithet, implying something evil, strange, to be shunned and avoided. Over the years Webster has softened this view a bit. In 1931 the dictionary said a slum was a foul back street of a city, especially one with a slovenly and often vicious population; a low or squalid neighbourhood. In 1953 a more charitable feeling prevailed and a slum was defined as a thickly populated street or alley marked by squalor or wretched living conditions. While defining a slum, a United Nations Report on Urban land policies speaks verbosely of "a building, group of buildings or area characterised by overcrowding, deterioration, unsanitary conditions or absence of facilities or amenities which because of these conditions or any of them, endangers the health, safety, or morals of its inhabitants or the community". The report of the Seminar on Slum Clearance held in Bombay in May 1957 describes a slum as

a "chaotically occupied, unsystematically developed and generally neglected area which is overpopulated and overcrowded with ill repaired and neglected structures". 'Slum' is a good, old fashioned word that carries real meaning—It sums up filth, squalor, over-crowding and sub-human existence.

Other Terms used in Different Parts of the World:

Slums ara referred to as
Jacales or Colonians Proletarians in Mexico;
Favelas, Mocambos, Algados or Vilas de Malocas in Brazil;
Callampas in Chile;
Villas Miserias in Buenos Aires;
Barriors Clandestinos in Colombia and Peru;
Ranchos in Venezuela;
Kampongs in indonesia;
Attap Kamponge in Singapore;
Barongbarongs in Manila;
Mushroom Colonies in Turkey;
Bidonvilles in French speaking Africa;
Harlem and Ghettos in New York;
Black Belt in Chicago;
East End in London.
The Cheris of Madras,
Abadis and Ahatas of Kanpur,
Chawls and Jhompravadas of Bombay,
Katras, Zopad-Pattis, Jhuggi-Jhompri colonies in Delhi,
and Bustees of Calcutta,

outslum the slums of many other countries of the world.

Emotional attitudes toward the slum are still reflected in popular definitions and value-laden terms that emphasize the seamy aspects of the slum, its filth and squalor, its poor social conditions, and the presence of vicious characters. (Marshall B. Clinard: 1966). To avoid the stigmata sociologists and social reformers have in their writings and utterances refer the plague spots of the cities as 'blighted area' 'Renewal Area' 'deteriorated Area', 'Gray Area', 'Lower Class Neighbourhoods', 'Inner-Core Area". etc. The United Nations has sought a more non-valuative term than slum or squatter and has thus substituted "transitional Urban Settlements" in the sense that their inhabitants are undergoing social and economic change often from a rural to an urban way of life.

Three Theories:

Herbert Gans, a Sociologist, in The Urban Villagers studios Italians in the West End of Boston before the area was obliterated for urban renewal. He says there are two types of low-rent neighbourhoods, the 'entry area' and the area populated by social rejects. In the entry area new comers to the city find their first places to live. Here they try to adapt their non-urban institutions and cultures to the urban milieu. This is the "Urban Village". (Gans Herbet: 1962).

Charles Stokes divided slums into the "slums of Hope" and the "slums of Despair". The slum of hope is a way station. One person or family may stay there a fairly long time, but there is a feeling of transition in it. The people there are going to get out, they are on their way somewhere. These people are not yet participating fully in the economic and social life of the city, but there is reason to believe, and they feel, that some day they will. The slum of despair is the end of the line and there is nowhere to go from here. They have given up all hopes. The slums of hope are characterised by the attitudes

of the residents toward social mobility i.e., to say whether they expect to improve their situations and whether there are opportunities for advancing out of slums. Slums of hope are generally the homes of recent immigrants, whereas those of Despair are populated by groups of longer residence. It is in fact an area where the social residue lives, the old, poor, once wealthy, the cast offs, shady characters, prostitutes etc. Radhakamal Mukherjee in his Indian working Class, probably characterizes the slums of despair in his statement—In the thousand slums of the Indian industrial centres, manhood is unquestionably brutalized, womanhood dishonoured and childhood poisoned at its very source. Michael Harrington writes that slums used to be a way station for hope but now house failures from the old waves of immigration plus poor people of racial minorites who arrive in the slums when the economic opportunities that existed for the earlier immigrants simply are not there any more. (Michael Harrington: 1962).

John R. Seeley points out that no one action is going to do away with the slum problem because the slum is many things. He also states that a change in the level of living alone, as for example the doubling of all real incomes, would not remove the problem. The slum is not just a dumping ground nor just a way station into the city. It also is a provider of goods and services that are demanded by the non-slum population, such as call girls, gambling, and crime connections. In this respect it performs a permanent function in the urban complex. This fact makes it even more difficult to change. To Seeley, the slum population is characterized by two major differences: the difference between necessity and opportunity, and the difference between permanence and change. For some, the slum represents a set of opportunities not available as easily or at all elsewhere. For others, the slum represents a set of necessities to which, despite their wants they have been reduced. Thus he sees four major types of slum dwellers: the permanent necessitarians, the temporary necessitarians, the permanent opportunists, and the temporary opportunists. Among the permanent necessitarians are the indolent, the "adjusted" poor and the social outcastes. Among the temporary necessitarians are the respectable poor, the "trapped". The permanent opportunists are fugitives unfindables, prostitutes and the sporting crowd. The temporary opportunists are beginners, climbers and entrepreneurs. (Seeley: 1959).

The " feel " of a slum is as important as any other single thing about it. This refers to the feel when a non-resident is in a slum, or the feel of things when one lives in a slum. The attitude of the slum dweller toward the slum itself, toward the city of which the slum is a part, toward his own chances of getting out, toward the people who control things, toward the "system"—that is the element which as much as anything else will determine whether or not it is possible to "do something" about slums. This is what makes **slums a human problem** rather than a problem of finance and real estate. This is what made a real estate man in Oakland, California, say that the problem is not how to take the people out of the slums, but **how to take the slums out of the people.** (David R. Hunter : 1966).

Characteristics of the Slum

Slums vary from one type to another, but certain general patterns of slum life are universal. Although the slum is

generally charaterized by inadequate housing, deficient facilities, over-crowding and congestion, it involves much more than these elements. Sociologically it is a way of life, a sub-culture with a set of norms and values, which is reflected in poor sanitation and health practices, deviant behaviour, and characteristic attributes of apathy and social isolation. People who live in slum areas are isolated from the general power structures and are regarded as inferior, and slum dwellers, in turn, harbour suspicions of the outside world. (Marshall B. Clinard : 1966).

David H. Hunter lists the following as the identifiable features of the slum problem :—

1. Poverty, absolute or relative. It may hurt more if it's relative, that is if you are relatively poor in the midst of affluence.

2. Run-down housing. The degree of dilapidation is not always uniform throughout a slum.

3. Crowding. High density per square mile or per block or census tract does not necessarily mean a slum. Some high rent areas have high density, according to a given ground measurement. They do not have high occupancy per room, as does a slum.

4. Concentration of lower class people. By all measures of social class—occupation, level of education, location of residence, community reputation, style of life, standard of living, membership in organizations, use of leisure—the slums are full of lower class people.

5. Racial concentration.

6. Concentration of the people of low educational achievement, low skill and cultural limitations.

7. Many welfare cases.

8. Internal mobility. More people in the slums move about to more places more frequently than do people who live in other places. These moves in the main are made within the slum area, or from one slum to another.

9. Crime. More crimes are committed by adults and juveniles in slums.

10. Broken homes.

11. Health problems.

12. Relocation problems.

13. Inadequate community services.

14. Skid row. Skid row is a special kind of slum. It collects more than just drunks. Every city has one.

15. Isolation and alienation.

16. Dirt.

17. Fire hazards.

18. The slum atmosphere. This is what all the above elements add up to. It is more than the sum of its parts and itself becomes a separate element; a qualitative factor of influence in the lives of the slum dwellers.

The slums in developing countries are particularly regarded in physical terms: they are over-crowded, seriously congested and seriously lacking in services and facilities. Such physical aspects alone, however, do not make the slum and poor housing per se does not produce crime

and other forms of deviant behaviour The problems of the slums are produced by the conditions that have developed there. The slum represents a way of life all its own with its own social organization and a sub-culture with its own set of norms and values. (Gerald D. Suttles : 1968). In turn these values are reflected in the social ills of crime, prostitution, or drug addiction, poor health practices, bad sanitation, a growing social isolation from the greater urban world and a general apathy and lack of participation in self-help activities at the community level (Marshal B. Clinard : 1966).

John C. Bollens and Henry J. Schmandt have well summarised the problem : Certainly there is much evidence to substantiate the argument that the incidence of poverty, disease, vice and crime, is far greater in slum districts than in other parts of the metropolis. What the picture overlooks, however, is that the housing problem of slum occupants are generally inseparable from family and community disorganization, poverty and disease. **Human lives as well as houses are blighted in these areas.** Merely moving occupants into better dwelling units will not cure other physical and social ills. Empricial evidence in fact is accumulating to show that improved housing does not have many of the social benefits initially attributed to it (1965).

The Function of the Slum

Although it is not hard to understand the problems of the slums in less developed countries, it is often difficult to understand that they actually perform real economic and social functions as a "natural" part of rapid urban growth rather than a pathological phenomenon. Slums reflect the larger processes of industrialization and urbanization which apply to a series of inter-dependent relationships with certain segments of the city's population as well as the city as a whole. (Marshall B. Clinard: 1973.) The social function of the slums of the United States has been described by Marc Fried and Jean Levin (1968) in these terms:- "Clearly any attempt to regard the slum as only residential habitat for the working class, as merely a locus of poor housing and low rent or as mainly a harbour for many forms of social pathology, neglects its prime significance in rendering possible a meaningful life in a society which is oriented to different values and different patterns of social relationships ".

Researchers on the slum or squatter way of life have shown that these areas are uniquely suited for the 'shock-absorber' role they have to assume to tide over rural migrants from their old ways to the modernity of urban man. As areas of transition themselves, they provide a comfortable abode for the formerly rural migrant finding his way in urban society. (Laquian).

In economic terms, slums are the subsidized areas of cities where tax fails to support almost half the urban services provided by Police, Fire and Health Departments. Slums continue to be the living areas of the poor, those discriminated against ethnically, the homeless, and the jobless. (McDonagh and Simpson: 1965). Charles A. Frankanhoff points out that in developing countries slums provide the city with cheap unskilled labour and cheap housing, they make possible an association of migrants from similar tribal and regional groups and they educate village migrants into the ways of urban living. With this unskilled and semi-skilled labour, city growth, particularly in developing countries, is realized. Slum dwellers export their labour and

import goods and services from other parts of the city. Though individual purchases may be small, the total consumption of these consumer commodities is significant. Without such a population cities could not survive. In less developed countries the development of slums belongs to urban development as a **natural aspect of growth, not as a "cancer" on the body social.** Thus the development of slums can be accepted as an expected social phenomenon: the slum community may be regarded as a community in development receiving its own share of urban community services, and contributing its own services to the development of the greater urban area. (Charles A. Frankenhoff: 1967).

Turner has pointed out that uncontrolled urban settlement is the result of normal processes of urban accommodation under the exceptional conditions of contemporary urbanization. By this hypothesis, squatter and other forms of uncontrolled urban settlement are not the "official aberrations" they so commonly are assumed to be. They are the perfectly natural response to an abnormal situation. (John F. C. Turner: 1966).

In a study that undoubtedly indicates the functions of the slum almost everywhere in less developed countries the slums of Calcutta were found to have several functions of major importance in the urbanization process :-

1. They provide housing at rents that are within the means of the lowest income groups.
2. They act as reception centres for migrants by providing a means of assistance in the adaptation to urban life.
3. They provide within the bustee a wide variety of employment in marginal and small-scale enterprises.
4. They provide a means of finding accommodation in proximity to work.
5. Their social and communal organization provides essential social support in unemployment and other occasions of difficulty.
6. They encourage and reward small-scale private entrepreneurship in the field of housing. (Robert J. Crooks: 1971).

The Balance Sheet of Slums :

Daniel Lerner points out that the social conscience of a modernizing society, will not allow, nor can its self-protection afford, the kind of death bred by squalor. (Learner: 1967). The kind of death bred squaller is illustrated by Radhakamal Mukherjee in his book 'Indian working class'. He writes—Child mortality is the surest index of the effect of insanitary housing on the working class family. In the industrial cities in India the rate of infant mortality is appalling.

INFANT MORTALITY IN RELATION TO THE NUMBER OF ROOMS OCCUPIED, BOMBAY CITY, IN 1921 & 1927.

	Infant Mortality per 1000 births 1921	1927
One room	822	490
Two rooms	322	203
Three rooms	191	222
Four rooms	133	195
Hospitals	190	88
General rate	667	316

Source : Annual Report of the Bombay Municipality.

The infant mortality rate diminishes with improvement in housing accommodation, being in the case of families occupying a single room more than double that of families occupying two rooms or more. (1951). Simple survival is the child's biggest battle in a slum.

Slums are the breeding ground for disease, crime, delinquency, prostitution and violence. Much of the demand for " law and order on the streets" is directed to the symptoms of the slums and thus makes substantial demands upon the resources of the city.

Thus even though slums contribute to the growth of a country in their own unique ways, they simultaneously swallow valuable resources, not necessarily in terms of money, but also in terms of human resources and talents. In all probability no methods could ever be devised to ascertain the true balance sheet. Barbara Ward has commented on the larger social and political effects of the extensive slum living in the less developed countries. "All over the world, often long in advance of effective industrialization, the unskilled poor are streaming away from subsistence agriculture to exchange the squalor of rural poverty for even deeper miseries of the shantytowns..... that year by year grow inexorably on the fringes of the developing cities. They ...... are the core of local despair and disaffection ...... unchecked, disregarded, left to grow and fester, there is here enough explosive material to produce in the world at large the pattern of a bitter class conflict......erupting in guerrilla warfare and threatening ultimately the security even of the comfortable West". (Barbara Ward; 1964).

Slum and Social Conscience

Heart-breaking and shocking scenes in the decaying cities havs stirred the conscience of quite a few. Jawaharlal Nehru always revolted at the sight of slums. When he visited a slum in Kanpur immediately after the inauguration of the E.S.I. Scheme, he remarked that slums are a

slur on the nation; they should be reduced to ashes. In his speech at Bangalore on October 6, 1955 he declared that " there is no reason why slums should be allowed to grow. It is bad enough to inherit slums. But to allow them to grow is your own fault and your city's fault and your population's fault and your government's fault and our fault. They should not be allowed to grow. I believe in no industrial development which comes at the cost of slums. If industry has to come here, each industry must take it its own particular and special responsibility to see that it will not cause any more slums and that it provides enough accommodation for its workers. I believe in no argument, economic or other which is based on the creation of slums. I have a horror of slums. I don't mind a person living in a mud hut. But I do mind slums in cities, and I have often said that if you cannot provide buildings for those dwelling in slums, give them an open space to live in, and give them at least some social services, like good sanitation and water supply. The rest will follow".

Decades of neglect, apathy and indifference have made India's largest, most vital and culturally alert city the world's urban disaster, and the horrible conditions prevailing in the slums of Calcutta have deeply shaken the right thinking persons of not only in our country, but also of other countries. Many have posed this question-Can India survive Calcutta ? This caused concern to many and made them reflect soberly on the problem of slums.

Rightly or wrongly, industrialization and urbanization have been accepted as indispensable to man's progress and prosperity. Proliferation of cities has thus become a universal phenomenon since the core of industry in most parts of the world, both developed and developing, is located in and around metropolitan areas. Richard Westebbe wrote in one of the issues (1971) of 'Finance and Development' the quarterly magazine published by the IMF and World Bank, "we are witnessing an historical transformation in which great forces are at work rending and remarking the whole social pattern......... It is an unbalanced transformation......yet urbanization, for better or worse, is at the core of the process of development". In other words he warns the planners and the legislators that the process is inevitable and that they must " rock with the punch". The growth of cities is a necessary accompaniment of the whole economy. Westebbe comes to the conclusion that the 'urban explosion' cannot be cured. At worst, it has to be endured. At best, however, it can actively be accepted and co-operated with. City authorities, he implies cannot repulse activity—they must not try to disperse the very thing that the city is designed to do. "The real economic base is the city itself... The capacity of a city to attract industries and growth is in part a function of how efficiently it is organized". He concludes that it is all therefore **a management problem**—the shape and the ability of Governments have to be geared up the new scale of the giant city. But this is where most of the cities of Asia fall down. The Governments of these cities are old-fashioned, patterned more on the lines of a village council. Some cities are split between several small municipalities—and as each new problem arises, a separate body is patched in to look after it. There is no overall planning. Furthermore, **these outmoded bodies do not regard economic growth as important**. In other words, to these bodies the growth of a city may be very prestigious politically, but the actual work of running the place as a vital economic growth point is only a confounded nuisance.

In the cities where there has been mass migration there is overcrowding, unemployment and poverty with resultant slums, delinquency etc. However, as stated by a U. N. Report: "This is not inherent in the industrialization process but **it is often a messure of the disparity between the pace of technological and industrial change and the pace of social change.** It reflects the failure of the community to develop new institutions, organizations, habits and ways of life in respect of the provision of security, personal status, social acceptance, moral controls of behaviour, leadership, forms of recreation, etc., to replace those associated with the extended family or which are no longer appropriate to an industrial society".

Slum Clearance

The subject is not a new one or a forgotten one or a neglected one, but it is so important that it is better to repeat, revitalise and re-consider this theme time and again, especially when the developing countries are committed to economic growth with social justice.

The slum is the result of a variety of forces, events, and deficiencies in our social and economic structure and in our ways of doing things. Some will say: "The slums have always been with us and always will be. They are part of city life that may be unpleasant but there's not much that can be done about them. They are an inevitable aspect of the urban scene." No one can prove that this is not so, since there is no experience in world history to call up in evidence. Logical analysis, however, does not support the view that slums are "inevitable". They are extraordinarily difficult to prevent and abolish is all too clear. They represent an extremely complex phenomenon and we simply don't know a precise formula by which they are produced or may be destroyed. That does not mean we are helpless before the gaze of a Gorgon, however. We do know some things and have good hunches about others—enough so that a defensible course of action can be plotted. If we fail to plot and follow such a course in the years immediately ahead, we will be in deep trouble. (David R. Hunter: 1966).

One thing is sure: Slums will not disappear by themselves. Slums have to be banished by wise planning and by a bold venture.

There are at least four approaches to the slum problem. One is the policy of demolition of slum houses and constructing new houses for the slum dwellers. A second one is the policy of slum improvement i.e. improving slum areas into habitable areas at an economic cost. A third one is providing site plus the services like drainage, latrine etc. and the last one is slum prevention through steps such as establishment of satellite towns and industrial estates, and strengthening of village economy.

Numerous obstacles have impeded progress in dealing with urban slum housing in our country. They include the enormous extent of the problem, the gap between shelter cost and income, national financial limitation, lack of savings, absence of a well established building industry, backwardness in the use of materials, often lack of controls over land costs, land speculation, and transfer of public housing units to private owners. Problems of finance are particularly difficult because of insufficient capital for housing, mortgages and co-operative saving programmes. (Marshall B. Clinard: 1966).

Richard Westebbe points out that to provide the millions of low-income dwellings that appear to be necessary, neither a country's own savings nor foreign aid can provide the resources without severely affecting other economic objectives. The risk of high rates of inflation, if a massive plan of "cheap" housing is carried through is a great danger. In any case, Westebbe says that if you give subsidized housing to people who cannot get the income to maintain it, you merely create new (and expensive) slums. He therefore suggests that at this early stage of rapid urbanization, city authorities should organize areas of land where a family can be given only the site, plus the services like power and drainage. Then let the family build its own housing as and when it can (and also when it can get off the unorganised shanty -town on to the next rung of the housing ladder.) Unattractive as it is to orthodox planners, planned self-built housing has great potential. Westebbe very forcibly emphasizes that the stinking shanty-towns of Asia will not be improved by merely pointing out that they are against the law or are a part of some local racket. There is no effective law against poverty and there is no effective law against politics, either. The law, if anywhere, ought to be against lazy and ineffective city governments. (Richard Westebbe: 1971).

With independence of India the national concern with slums has heightened and many experts had fallen in line with the thinking of our late Prime Minister Jawaharlal Nehru who thought that the best remedy lies in destroying the slum, tearing it down physically, erasing or burning them and providing new and suitable housing. One of the initial difficulties faced in carrying out this programme was the unwillingness of the slum dwellers to shift from their present residence, which is very close to their work place. For instance 74% of the slum dwellers in Madras were not willing to quit the slums when they were asked whether they were willing to shift from their present slums. (Mulkh Raj & J. B. Kansal: 1971)

Marshall B. Clinard writes that the logic of a programme of burning the existing slums and proving new and suitable housing and its feasibility need careful examination. There are four chief difficulties:

1. the immensity of the physical problem in terms of limited government resources;
2. the likelihood of increasing urbanization;
3. the fact that majority of slum problems cannot be attributed to physical conditions alone, and
4. the fact that destruction of housing may also involve destruction of what positive human associations already exist in an area.

Extent and Cost.

In 1958, it was estimated that as many as 60 per cent of the people in the large cities live in physical slums and that 1.5 million houses in Indian cities are unfit for human habitation. (Report of the Advisory Committee on slum clearance. Government of India 1959). The study done by Kothari showed that urban housing congestion is highest in Tamil Nadu and lowest in Orissa. The study also estimated that about 18 per cent of the houses in urban areas were bad, dilapidated or impoverished. All of them needed replacement-Analysis of congestion in urban housing revealed that West Bengal, Maharashtra, Tamil Nadu and Gujarat were "very congested" states, whereas Jammu and Kashmir and Kerala were "moderately congested". The remaining states were " congested " where 60 to 80 per cent of total households were living in one room or two room tenements. The magnitude of the housing shortage is very serious. The shortage was estimated at

at 11.9 million units at the beginning of the Fourth Plan. The shortage had been increasing every year at the rate of 3,50,000 units 2,50,000 units to cover new family formation and 1,00,000 units for replacing dilapidated houses. The planners pointed out that situation called for a considerable increase in housing construction. But the recent rate of new construction in the country is estimated to be two houses per 1,000 persons. It is woefully inadequate as compared with the need of 10 to 12 houses per 1,000 persons. (Kothari D. K. Paper presented at the first Indian Geographical Congress held in New Delhi). U. P. Mazumdar writes that the rate of new houses built per 1,000 population was as low as 3.5 per annum whereas in other countries the new houses for 1,000 population were between 6 and 10. In U.S.A. it was 6.5 units, in France 7.3 units; in Sweden 10; and in Russia 10.3. (Mazumdar 1971). It was estimated that at the present rate of growth, total slum clearance would require about 115 years and expenditure equivalent to at least two National Five Year Plans. Three-fourths of the urban housing shortage occurs in the four main cities in India; Taking only the estimated increase in urban population for the five years ending 1966, the cost of housing at the conservative figure of Rs. 1,600 per unit, would amount to 2,880 crores. If the cost of land were to be included a total of 3,500 crores would be involved. (Sachin Chaudhari. 1962). But the programme of slum clearance is becoming costlier day by day owing to rising land and construction costs. Also because of increasing urbanization, the housing situation in Indian cities has actually been getting worse rather than better.

Problems of slum Relocation.

The Indian Third Five Year Plan pointed out that two main problems in implementing a slum clearance programme were the slum dwellers' inability to pay even subsidized rents and their reluctance to move from the areas selected for clearance. Slum dwellers often resist removal to areas of better housing, and when they do move they are often dissatisfied. This dissatisfaction arises first from such economic dislocation costs as higher transportation expenses, from the inadequacies of most urban municipal transport and from the loss of some "marginal" employment opportunities. Second, relocation often has grave consequences in the disruption of what community relationships have existed. When they are rehoused in a manner that fails to take the community feeling generated in the old slum into account, the resulting disruption of some of their regional unities can result in friction. Moreover the slum dweller is often dissatisfied with the distance from his new dwelling to his place of work.

The Crux of the Problem of Slum Clearance.

Marshall B. Clinard warns that slum clearance is not exclusively a matter of replacing substandard housing with new tenements or even with planned slums. It is not always true that when decent housing is provided, such other aspects of community life as proper maintenance of living quarters and facilities automatically follow. Proper orientation of the residents to a better and organised way of life and to the maintenance of the entire neighbourhood is essential, and this orientation requires the systematic education and motivation of all the people, men, women and children, in the fundamentals of personal hygiene, home management and environmental sanitation. (Marshall B. Clinard: 1966).

The slum is usually regarded in physical terms—over crowded, seriously congested and seriously lacking in services and facilities. Such physical aspects alone do not make the slums. The slum represents a way of life with its characteristic norms, values, attitudes and mentality—more often referred to as slum mentality. Even with the provision of improved physical conditions for slum dwellers the slum way of life and the slum mentality continues. Slum clearance projects bring together a new group of strangers who destroy whatever community feelings and informal social controls previously existed tn the slum areas. Substitutes are usually formal controls administered by an external housing agency which attempts to deal with the residents' problems with regulations that often result in counter-reactions.

A social scientist who studied a slum clearance programme in Puerto-Rico wrote of the tremendous implications in the lives of these slum people. It meant moving from small houses to apartment buildings, from wooden construction to concrete buildings, from squatters right to tenancy. They are shifting day by day to planned administration. The planner faces the problem that many people are not ready for the change and do not want to make it in this particular manner. Those who do make the move are frequently not those who could profit most by the change. (Kurt W. Back: 1962). Another Puerto Rican study found the slums to be a self-sustaining community in which rural newcommers found new ways in a neighbourhood of friendliness, strong kinship ties and co-operativeness. In contrast the management of public housing projects crushes leadership, old kin and neighbourhood ties are broken up and the climate is one of frustration, suspicion and resentment. (Helen Safa: 1971).

Taking into consideration the fact that the slum dwellers are not eager to shift new areas even though good houses are provided at subsidized rates, a national policy has been laid down by the Government of India and slum clearance in our country is based on the following three principles :-

1. Whenever slums are to be cleared it is to be done with minimum dislocation to the population involved;
2. Rents must be kept within the paying capacity of the tenant;
3. The houses built should conform to the minimum standards laid down in the slum clearance scheme. It is felt that whenever possible a two-roomed house with a bathroom (including water closet) kitchen and a small courtyard should be built for every family. Essential services such as water supply, sewage and electricity are to be supplied to every locality. The authorities are also required to bear in mind the need for proper civic amenties such as open spaces, markets, schools, dispensaries and post offices.

Bearing the above principles in mind, the initiative for formulating and executing slum clearance projects is left to the states. To avoid delays which used to occur in sanctioning such projects as a result of the triangular correspondence between the Union Government and the State Governments and the Municipal or other constructing agencies, it has been decided to empower the state governments to sanction slum clearance projects themselves, without recommending them to the Union Government, so long as the projects conform to the broad provisions of the scheme.

Moreover, the Government of India had taken steps to alleviate the sufferings of the slum dwellers by making environmental improvements by providing them with drinking water, light and sanitary facilities. It was also proposed to dispense health in the numerous disease ridden and evil-smelling slum dwellings by taking medical aid to their doorsteps.

Slum Clearance Plans in Most States.

Calcutta for years was a city doomed to decay and despair. With greater political stability and good planning, the city wears a new face. The Calcutta Metropolitan Development Authority which came into existence in September 1970, has launched a massive programme with the help of World Bank, on many fronts and especially for the improvement of basic amenities such as water supply, sewage, drainage, garbage disposal, traffic, transportation, slum improvement and housing. The World Bank representatives studied the programmes, visited the projected sites on a twelve day tour and at last said "It is one of the biggest challenges against human decay and degradation in the East so far''. There are over 3,000 slums in Calcutta. When the CMDA took over slum improvement it developed a new concept-a concept of improvement as opposed to the popular and more spectacular concept of re-housing. The cost of re-housing was found to be astronomical—Rs. 3,500 per head. The cost of improvement is only Rs. 120 per head. So far 1,500 slums have been improved. A Kalikata Bustee Pragati Sangh (KBPS) has been formed for follow-up action.

In contrast to the policy of improvement, Tamil Nadu gave greater emphasis on the policy of "re-housing". It was felt that if the problem of slums is to be tackled on a rational and efficient basis, there must be an exclusive organization dealing with this problem. For the first time in India, the Govt. of Tamil Nadu has formed a Slum Clearance Board with the objective of not only clearing the slums within 7 years but providing suitable shelter to lakhs of ill-housed citizens and also for bringing about improvements in some of the slums where re-housing programme will come into effect after some time. To achieve this objective the Government of Tamil Nadu has drawn up a special Rs. 40 crores Seven Year Scheme. At the rate at which the four year old statutory Tamil Nadu Slum Clearance Board has been working the target does not seem to be very high. To wipe out slums, altogether the Board will need Rs. 1,640 crores. Officials feel that with consistent government allocations, revenue from commercial schemes, rotation of hire-purchase moneys and aid from world organization such as World Bank, the project can be pushed through in the next 10 years.

The Maharastra Government has announced the setting up of the Slum Improvement Board to tackle the menacing problem. The slum population in Bombay is estimated to have doubled during the last decade and today it is anywhere between 13 and 15 lakhs. The total number of slums in Bombay is estimated to be around 640. (Hindu Weekly Edition, August 24, 1975) The Municipal Corporation has provided basic amenities to 57 of the slum colonies on its land at a cost of Rs. 3 crores during the last three years. The funds came from the Union Government under its Slum Improvement scheme.

The problem of the Bombay Metropolitan area is so overwhelming that more than Rs. 1,700 crores will be needed to meet its minimum needs like water supply, transportation, housing and the provision of basic amenities in slum areas. Accor-

ding to Dr. Rashmi Mayur, Director of the Urban Systems Centre, Bombay, the population density in the city is one of the highest in the world—about 50,000 a square kilometre. It is estimated that the city requires at least 3,00,000 housing units immediately and 50,000 units should be added each year to accommodate the increasing population. Bombay awaits world Bank aid to start its gigantic programme.

In Delhi the work of improvement of slums began in 1960 by the Slum Department of the Corporation. A population of 10 lakhs were then living in slums. More then 7,000 tenements had been constrdcted three years ago and allotted to the families from different slum areas. Several are still under construction.

Every state is going ahead with ambitious plans to re-house and improve the environmental sanitation of the slum areas, but there is little or no follow-up measures undertaken so far and hence the desired objective is not achieved.

Slums of Mud and Concrete:

An article in the Sunday Times Magazine of London, in disapproving of the policy of knocking down the slums and rehousing the inhabitants in multi-storeyed concrete buildings, makes the point that such rehousing cannot eliminate slums altogether but will have only substituted slums of mud and brick by more durable ones in concrete. The argument proceeds from the fact that since people can and do live happily in homes made of mud-mortar and brick roofed with country made tiles, the effort should be to have cleaner shanty towns with this type of dwellings rather than build concrete boxes instead. And the argument is clinched by the observation that since these dwellings can last 15 years at best and therefore can easily be substituted or changed, they should be a better choice than concrete slums which can last 70 years and will be difficult to substitute. (Quoted by the Hindu - Editorial, April 14, 1974). The World Bank recommends the upgrading of the squatter settlements and building them to less rigid specifications than now to ensure that they are not too durable to be removed when required. The Hindu in its editorial (April 14, 1974) writes that the logic given by the Sunday Times Magazine, is not to be dismissed as specious, seeing how the tower blocks rehousing slum dwellers have begun showing signs already of relapsing into a new kind of slum. The fault, however, is not all in the structure of the dwelling. A great deal of it is in the uncivic habits of the people, who soon convert decent living accommodation into an unhygenic and unlivable place. Indeed the average Indian has scant regard for environmental cleanliness; he needs to be educated out of his uncivic habits. An equally important pre-requisite for urban development is the provision of potable water, sewers etc. Investments on these cannot be grudged because without these facilites, the residents will lack the means to keep their environment clean even if they wish to There is every reason for civic authorities not to shirk their responsibilities in this respect, because a cleaner city spends less on medicine, tones up the physical efficiency of its inhabitants and functions as a catalyst for progress instead of being an obstacle.

Studies of the behavioural pattern of hut or slum residents have revealed that, even when accommodated in better quarters, they tend to reduce the new environs to as unclean and insanitary a place as their original homes. Slum

clearance does not stop with change of thatch by fire-proof asbestos or pucca tenements, but involves bringing about a change in the way of life. This would entail, on the part of the authorities, first educating such beneficiaries as to their new social responsibilities and secondly checking periodically whether the essential amenities provided to them are used properly. In the absence of such a follow-up, there may be a change of roof, but slum mentality and slum living will continue. As for problems of environmental cleanliness much depends on how voluntary social welfare organizations supported by the Government are able to put the idea across to the slum dwellers.

A National Seminar on Slum Clearance held in Rajaji Hall in June 1975 pointed out that despite the efforts taken by the Tamil Nadu Government to relieve the sufferings of slum dwellers, the problem is not getting better. The Tamilnadu Slum Clearance Board now proposes to abandon the policy it has been following so far of building permanent multi-storeyed tenements. Hereafter it will build semi-permanent single tenements. It will lay the foundations and build the four walls and the roof. The allottees will contruct the rest. The new programme has been drawn up because the colonies of tenements built in many parts of the city are in danger of reverting to slum conditions. The reason is the lack of a hygienic sense on the part of the dwellers. It is therefore good that the Board proposes to inculcate in them virtues of cleanliness.

The Welfare Approach to Social Change

Social Welfare Centres and the Problems of the Slum

Despite the enormity of their slum problems, most developed and less developed countries today have continued to rely mainly upon social welfare centres to bring about improvements among the masses in the slum by providing services of various types. Theoretically a social welfare centre is supposed to change the slum dwellers to a different set of values and norms. But experience shows that Social Welfare Centre Programmes involve only individuals and little may be done to improve conditions in the surrounding areas. Consequently the effect on the total community may be negligible. Moreover, very often various programmes are being organized in the slum by the Centre with the help of outside volunteers without involving groups of people in self-help efforts. Unless a group approach is made, the effect of the programme have no permanence. In addition to failure to use a broad based group approach, centre programmes are not organized in such a way that credit for programmes or success can be given to the people in the area. Because of the organization of a centre, credit for any accomplishments often goes to the centre itself or to its staff, whereas failures are often attributed to the people's apathy and lethargy. It is therefore unrealistic to hope that conventionally oriented community centres can successfully create an impact on the large scale problems of cities in either developed or underdeveloped countries. This statement does not imply that the centres should be abolished, but rather that the approach of the centres must be re - examined and reinvigorated with new and sounder techniques to stimulate real self-help, full neighbourhood participation and indigenous leadership among the residents. (Marshall B. Clinard : 1966).

Too often those with a welfare approach have assumed that the problems of the slum arise from failures to provide sufficiently broad or adequate service. Hunter

terms this view "the illusion of services" for there is little evidence that such services seriously modify the slum environment. Where the slum dweller is apathetic, the services whether for prevention of delinquency or for adult education, have largely gone unused. Whyte has also questioned the social welfare approach to social change in slum areas in Boston's North End. Gans found much the same situation in the West End of Boston.

The social welfare approach does not lead to real self-help and without a determination on the part of the slum people themselves to change the norms and values of slum life, it is unlikely that a slum will be basically altered. At most, certain individuals will be helped, while the slum and the majority of the people who live there will continue relatively unchanged. Those affected by the slum must come to assume some responsibility for change.

The experiment in housing conducted in Indore, Madhya Pradesh by the Trade Union, (between 1955 and 1960) was based on the principle that the slum dweller should assume some responsibility to social change. The expriment is as follows :- Each slum dweller was helped to have one or two cents of land of his own and he was helped to erect a small house with two rooms and a kitchen and sanitary facilities. The land around the house was fenced and they were encouraged to have their own kitchen garden and fruit trees. Also they were encouraged to keep the whole place clean. Each householder took the responsibility of keeping his own house and surroundings clean. Somehow a sense of belongingness was created in each householder. This has helped in keeping the whole area clean. Nobody has left that area. The old slum area was thus converted into a small garden city.

Urban Community Development as a new Approach to Social Change

Urban community development offers a new approach to some of the problems of urban areas generally and of the slum in particular. It involves two fundamental ideas: the development of effective community feeling within an urban context and the development of self-help and citizen participation, of individual initiative in seeking community integration and change. In other words this approach relies directly on the slum dwellers themselves. If their apathy and dependence can be overcome and replaced by pride and absence of initiative, the slum dwellers can make good use of their " millions of hands and their own resources, meagre alone but large when pooled, in trying to solve their manifold problems. (Marshall B. Clinard : 1966).

The Ingredients of an Urban Community Development Programme.

The ingredients to an urban community development programme are the people and their problems, the government and voluntary resources available to stimulate self-help, and urban community organizers to locate and develop indigenous leaders and to translate their problems in such a way that they can be adequately interpreted by government and private agencies. Urban community development involves democratic action, stressing citizen participation, self-help, and self-determination through group action, in meeting the problems created by city life. In urban community development, people become involved in responsible action directed toward solving mutual problems. Such citizen participation is a process through which individual citizens have direct roles in the physical and social changes affecting their immediate lives. The approach

assumes that a community has the capacity to deal with its own problems. Even in the most "hopeless" slum and among the most apathetic residents, latent skills can be developed to alter the environment. The approach to the problems to the city slums through urban community development involves the following elements:-

1. Creation of a sense of social cohesion on a neighbourhood basis and strengthening of group inter-relationships.
2. Encouragement and stimulation of self-help, through the initiative of the individuals in the community.
3. Stimulation by outside agencies when initiative for self-help is lacking.
4. Reliance upon persuasion rather than upon compulsion to produce change through the efforts of the people.
5. Identification and development of local leadership.
6. Development of civic consciousness and acceptance of civic responsibility.
7. Use of professional and technical assistance to support the efforts of the people involved;
8. Co-ordination of city services to meet neighbourhood needs and problems.
9. Provision of training in democratic procedures that may result in decentralization of some government functions.

The four main objectives of an urban community development programme applicable to the slum are development of community feeling, self-help, indigenous leadership and co-operation between the government and the people in the use of services The first requires the creation of effective community relationships which create in them a feeling of common purpose, of belonging, of being neighbours. A second goal is the discovery of "effective ways of stimulating, helping and teaching people to adopt new methods and learn new skills, More permanent improvement in slum living conditions cannot be achieved by a largely apathetic collection of individuals; the people themselves desire change and are prepared to exercise their own initiative in planning and carrying out projects and programmes to meet their own needs. Many people assume that slum dwellers will move up the social scale merely by receiving economic and educational opportunities from outside sources of power; it is often this very dependence on others that leads to apathy, further dependence, and failure to develop necessary economic and educational skills. This dependence over a period of time becomes institutionalised in habits, traditions and organisations in the slums. It becomes "customary" to drop out of school, to reject conventional agencies of social control, to scale down aspirations. Financial means, therefore, are only one of the many kinds of power sources; feelings of personal creativeness among slum people may also give a sense of power. Third, improvement of the community itself comes through recognition of the need for change and for citizen co-operation in self-help activities. The people themselves need to become involved in the identification of needs, the selection of priorties and carrying out of activities. To bring about change successfully potential indigenous leadership in local areas needs to be identified and developed. Such indigenous leadership then carries direct responsibility for initiating change among the people. Successful change in a slum area depends a great deal upon the motivations and interest of such leadership. Finally, the nature of the slum life makes it doubtful

that people can improve their patterns of life and their surrounding environments without the aid and stimulation of government and other agencies. Urban community development is concerned not only with stimulating citizen participation and self-help schemes but also with helping to mobilize public voluntary and traditional services in association with the people's own efforts. (Marshall B. Clinard: 1966).

The Delhi Experiment

In 1958 Delhi became the site of the first experimental project in urban community development in an Indian Slum.

Despite deplorable physical and social conditions, the Delhi slum dwellers do little to correct the situation. Over all hangs the deadly air of apathy and there is an almost total absence of civic or social responsibility. The people have little faith in or awareness of their capacities to do anything and leave solutions entirely to national, municipal or welfare institutions. They depend upon local authorities and at the same time are antagonistic toward them because solutions are seldom forthcoming. On the other hand they do little to co-operate with the authorities.

The Delhi Pilot project in urban community development was initiated primarily because it was believed that something could and must be done to alleviate slum conditions.

In its over-all objectives of developing a programme, organizing, communites, enlisting self-help and training local leadership, and working out techniques of change, the Delhi Project appears to have been reasonably successful. Administrative problems did arise, some Vikas Mandals were ineffective, and some workers did not perform up to expectations. Much more could have been achieved had it not been for several significant factors. Of major significance was the continued indecision about the future of the Department in the Municipal Corporation which continued for more than five years until in 1965, the work of the Department was finally made a permanent agency, the new Department of Community Services. Greater co-operation from other departments of the Municipal government would also have increased favourable results as would stronger support from the Central Government in the early years of the project. A major problem in such urban community development is to devise ways of keeping up the original momentum of citizen help organisation. Vikas Mandals and Vikas Parishads were not magic lamps that could work miracles, they were human instruments much subjected to stresses and strains. The growth of community feeling is a slow process and it can be fostered only as small groups like Vikas Mandals work jointly and continue to assume responsibility and initiative for improvements. At least several years, perhaps, five or ten, are required to put a Vikas Mandal or a Vikas Parishad on a firm footing, during which time some staff guidance and financial aids must be continued. The pace of change is slow in the face of centuries old practices.

Overall, the results were encouraging when one recognizes that India is a difficult setting in which to work and not an easy place in which to bring about change of any kind. The slum furthermore, presents serious problems for such an experiment anywhere, without added difficulties and hindrances like those faced in the Delhi project. With a more receptive bureaucratic setting and a different social and cultural situation, one might

well expect even more encouraging results. If this much change was produced in the Indian slum, the possibilities of urban community development elsewhere, under more favourable conditions, seem encouraging. Perhaps the most practical evidence of the success of the Delhi and the later Ahmedabad projects was the adoption in India in 1965 of a national programme of urban community development patterned after the two projects. Such a decision to enlarge the scope of the work was reached after a careful study of the organisation and achievements of these two pilot projects. (Marshall B. Clinard : 1966).

Conclusion

The problem of slum is more than that of moving people out of slums; rather it is one of change or even eradication of the slums themselves. It seems evident that slums cannot be rapidly changed simply by providing more professional help and guidance, greater economic and educational opportunities to overcome poverty and more and better co-ordinated services. Some slum dwellers, however, may be changed.

Widespread and effective change in the slums requires assumption of responsibility for, and contributions by the people affected. They must have a stake in the results and an appreciation of the need for change. "When change in custom is the immediate objective, the client community's co-operation is obviously essential. As they contribute to change by doing things for themselves, a total situation develops in which slum dwellers are likely to be more receptive to change as a whole. As Haggestrom has pointed out, the poor have then found themselves in a problematic situation and have themselves been moved to do something about it. (Warren C. Haggestorm : 1965).

Changes in slums can be accelerated through the use of the large potential source of manpower and resources provided by the slum dwellers' own efforts. People who live in slum, areas can do a great many things for themselves. There are large scale possibilities for physical improvements, health and sanitation, education and recreational and cultural activities. They can help protect public property like schools and parks from vandalism; assist in the control of drug addiction, delinquency and illegitimacy; establish credit unions and co-operative stores and promote the co-operative ownership of recreational equipment and library materials and co-operate with teachers and serve as assistants to help with school problems and increase motivation for learning. Self help efforts in job training can also be organised.

The initiation of effective change in slum areas requires the recognition of several principles. As Lippitt and his associates have pointed out, the new profession of community-development work seeks to use knowledge of the behavioural sciences in efforts to bring about community change and to stimulate self-help. (Ronald Lippitt : 1958). An agent of change must have a scientifically formulated theory of human behaviour, a clear idea of what is to be changed, an accurate knowledge of the specific situation, an understanding of his own values and motives, and a knowledge of how to record his experiences, in order to contribute to a body of knowledge about social change. (Goodenough : 1963). A set of principles or concepts for developing community feeling and self-help in a slum area is proposed by Marshall B. Clinard.

They are :-

1. A group approach to slum problems.

2. Recognition of community difference.
3. Creation of a new type of social organization.
4. Group perception of the need for change.
5. The pursuit of self-imposed change.
6. The use of voluntary groups for change.
7. Change in identity or self-image.
8. The utilization of indigenous workers and leadership.
9. Representative community leadership.
10. The giving of responsibility and credit to ordinary people.
11. The use of conflict and the need for power in social change.
12. The utilization of competition among groups.
13. Utilization of chain reactions in social change.
14. Utilization of outside assistance in attaining objectives, and
15. Decentralization of some governmental functions.

This frame or reference does not imply that this approach alone will solve slum problems with their complex mixtures of physical, economic, educational, and political factors. Any effective solution requires changes within a balanced framework in which all ingredients are recognised.

Apathy and lack of confidence in self-help characterize, most beginning slum improvement projects, but newly created self-images provide motivating forces for slum people to change their practices. Change is identity or self-image and recognition of different expectations are essential in any successful slum action programme. Planned identity change includes awakening the desire for change, new experiences to change self image, commitment to change in self-identity and recognition by others of new identities and roles. (Goodenoug: 1963). Haggstorm has suggested that successful social and community action by a poorer person enhance his conception of his own worth and helps to overcome his feeling of powerlessness. He suggests that to be effective such social action should have the following characteristics ;

1. The poor see themselves as the source of the action.
2. The action affects in major ways the preconceptions, values, or interests of institutions and persons defining the poor.
3. The action demands much in effort and skill or in other ways becomes salien: to major areas of the personalities of the poor.
4. The action ends in success.
5. The successful self - originated important action increase the force and number of symbolic communications of the potential worth or individuals who are poor.

The desire for status has been a useful tool in changing the self-image for as one student of urban affairs has declared: "The awakening of self-respect is the most powerful agent for renewing our cities socially, and for that matter physically. Partly this must be earned ; partly it must be freely given." (Paul N. Yivisaker: 1966) In the Delhi project, efforts were made to

develop feelings of importance, prestige and respectability among slum dwellers. Women assumed greater responsibility for change within the new type of organization based on territorial ties and their active participation helped to demonstrate their social equality as well as to change their images of themselves. Well entrenched slum practices, difficult to change under any conditions, may be approached in circuitous fashion. Success in the accomplishment of easier and more readily accepted objectives enables groups to tackle these of increasing difficulty. In this way a chain reaction may be set in motion. This principle can be illustrated from the Delhi project where a beginning was made with such traditional practices as the singing of religious songs and followed step by step through child-care competiotions, child-care classes and then family planning.

In both affluent and poor countries, there is a need for more equitable distribution of wealth and elimination of poverty, as well as for greatly improved housing conditions ; in less afluent societies, there are acute problems of increased industrialization, overcoming widespread unemployment and increasing health facilities. Despite these, there is still much that can be done by slum people to help themselves.

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Summary of Discussion

In the discussion of the paper at the Seminar held in the Seminar room of the Institute on Thursday 30th October, 1975, the chairman, Prof. S. Ramanathan, in his opening remarks, said that the approach of the paper was scholarly and contained a number of valuable references and that the major problem before the state is prevention of slum formation in cities. The author in his presentation stated that approximately one-third of the urban population in most parts of the world live in slums. However, urbanisation is a relatively modern phenomenon. In 3000 B. C. the extent of urban settlements in the world was negligible ; in 100 A.D. it comprised only about 1 per cent of the population rising to about 5 per cent in 1500 and in 1965 almost one-third the population lived in urban areas. Described euphemistically as transitional settlements by U.N. Agencies, slums of a large city are characterised by sub-human living conditions, insanitary without minimum amenities or facilites, dilapidated makeshift housing, low income levels, serious overcrowding and crime. The prevalence of slums is indicated in the varied nomenclature, Cheris of Madras, Busties of Calcutta, Jhompravada of Bombay, find their equivalent in the East End of London, Black Belt of Chicago, Callampas of Chile, Vilas Miserias of Buenos Aires etc. The locus of poverty with its culture of misery in slums is in sharp contrast to the affluence and luxury at the command of a small group of

the city. While condemned as a cancer on the body social, these neglected areas provide economic and social services in developed countries, and cheap and unskilled labour in developing countries where they are a natural part of urban development. Moreover being in a state of transition themselves, they perform an important function in the acculturation of rural migrants to the cities, besides providing a wide variety af employment within the slums themselves. There is, however, a totally undesirable aspect to slum life. The more prosperous sections of the society depend on these settlements to cater to their anti-social needs for gambling, illicit liquor, call-girls etc. Against this general picture of the descriptions, features and functions of slums, the growth of slums in Madras City during the period 1933 to 1971 is an indicator not only of rapid industrial development but also of the failure of the Civic authorities to exercise some control over the settlements of this rapidly growing segment of the urban population and to ensure basic sanitary living conditions to the extent desirable. The dimensions of the problem are revealed by the escalation of slums within the Madras city in number and population. In 1933 there were 189 slum areas with 15,942 units rising to 306 slums, (57,436 families with a population of 2,65,000 in 1953-54 and 1,202 slums in 1971 with a population of 7,37,531. In effect one in three of the total population of the city lives in slums. While urbanisation is an irreversible process, slums are a measure of the disparity between the pace of technological change and the social change it renders necessary. It is accepted that slum clearance is a matter of social conscience and good municipal government, but there are no easy solutions. The four possible approaches for slum clearance are: demolition of the slum hutments and construction of new houses (brick and mortar) in the same sites; slum improvement; providing house sites with services like drainage, lighting etc; and the prevention of slum formation by establishment of satellite towns and industrial housing colonies. In Madras to-date, the Tamil Nadu Slum Clearance Board has adopted the policy of demolishing the existing thatched huts and constructing multi-storeyed tenements. This solution has its disadvantages, in as much as the new structures are expensive, the subsidized rent does not fetch a high return and the occupants do not maintain the accommodation in a reasonably sanitary state. Further the "slum mentality" with its characteristic psychological attitudes cannot be modified by a change in housing alone. Moreover, living in multi-storeyed building seems to have destroyed the patterns of community living developed in hutment areas. A successful national policy for slum eradication must not only provide better living conditions, trained professional help and specially structured employment and educational opportunities but also integrate environmental improvement, a social welfare approach and systematic development of leadership from within, spelling out self-help programmes.

In the discussion that followed, the services rendered by the New Residents Welfare Trust in some of the Slum Clearance Board tenements in Madras were described. The Trust sponsored by a citizens' committee is composed of 3 representatives from the Tamil Nadu Slum Clearance Board, 3 from the Church of South India and 3 from the 77 Society. Community development services are organised and rendered by Welfare Officers residing in the tenements. CARE, German Leprosy Association and Family Planning Department are also co-operating in this welfare work. The lack of initial communication between the Slum Clearance

Board and the Corporation of Madras, prior to construction of tenements in the corporation area, has led to a situation in which regular municipal services such as sewage, water supply etc have yet to be established for these tenements. A view was expressed that the slums meet certain economic needs. A slum clearance policy should lay greater emphasis on providing employment to the residents and environmental improvement rather than permanent housing. A hopeful sociological aspect is the noticeable decrease in caste awareness. It was felt that the approach to slum clearance has so far been one of description and analytical study instead of being action-oriented and problem solving. A specific aspect deserving further study is the reason for such a rapid growth of slums in and around Madras. To prevent proliferation of fresh slums, dispersal of new industries to Class III towns and an enrichment of the content of rural life which would reduce migration were possible remedies. Another suggestion was that provision of housing for at least a sizeable percentage of the labourers should be made compulsory for industries. Without detailed statistical analysis of employment, income patterns and unemployment, it will not be possible to establish conclusively that slums are an inevitable concomitant to industrialisation. It was observed that the majority of slum dwellers belonged to the casual labour class. A significant feature was that while the working force in Madras had increased from 18 to 32 per cent in the last decade, the increase of slums was of the order of 54 per cent.

The paper has provided useful references on this cruel social problem and a bibliography would be valuable. In view of prevailing constraints in building materials, future programmes should concentrate on improvements and services rather than the sole emphasis on the construction of new houses. This approach would also solve some of the sociological problems. Improvements in living habits and psychological attitudes can be achieved by trained social workers mobilising the slum dwellers, particularly the women, to participate in improvement programmes, as well as co-ordinating the efforts of voluntary workers and students in this field of urgent social action.

Some Notes on the State of the Economy*

Inflation's toll and control:

Any evaluation of the economy must begin with an analysis of the bout of inflation which it was subjected to between 1972 and 1974 as evidence of which the general index of wholesale prices rose by 110 points between October 21, 1972 when it was 210.9 and October 26, 1974 when it was 320.4. This price rise of 44 per cent in two years (October 1972 - October 1974) was a little less than double the 24 per cent inflation experienced by the economy in the two drought and post-Pakistan war years of 1966-68.(1) Except for these 2 years, since planning began in 1950-51, until 1972-73, the economy has had, what I would call, a mild 3-4 per cent annual rate of inflation which has been in a sense deliberately built into the economy for two major reasons. First mild inflation was a means of increasing savings and investment in the economy. Inflation is in effect a tax on money and like all taxes reduces real consumption and provided it is of this order, diverts the resources so saved into investment. Inflation is the one form of taxation in which there can be no tax evasion or tax dodging. Inflation was thus used in all our four Five-Year Plans along with foreign aid to cover the gap between savings and investment needs, between available investment resources and the production potential of the economy, between what was physically feasible and what was fiscally possible. Secondly the plan strategy had all along been to build up on excess demand in the economy and regulate supplies through various administrative controls. This supply management and the continuous increase in investment in the core sector resulted in the annual average 3 to 4 per cent inflation up to, and including, the year 1971-72.

The hyper-inflation that marked the two subsequent years has introduced several distortions and imbalances in the economy. It has reduced the rate of domestic savings from 11.4 per cent of the GNP in 1971-72 to 9.9 in 1973-74.(2) (The draft Fifth Plan on the other hand makes the assumption that, for 1973-74, the rate was 12.2 per cent, (3) being one of the many unreal assumptions whose correction the final revision of the Plan document should ensure). This reduction continued in 1974-75, for which we do not have final figures. Savings are effected by households, the corporate sector

(1) **Index Number of Wholesale Prices (1972-74):** Office of the Economic Adviser to the Govermment of India.

(2) **Annual Report on Trend and Progress of Banking in India** 1973-74; Reserve Bank of India. p. 14.

(3) Report on the **Fifth Five Year Plan 1974-79;** Vol I, p.42, Planning Commission; Government of India.

*Extracts from the lead paper presented by Dr. Malcolm S. Adiseshiah to the National Workshop on Mid Term Review of the Economy, organised by the Associate Chamber of Commerce and held in Bombay on September 17 and 18, 1975

and the government. As far as household savings are concerned, CSO's estimates show its dominant position-rising from 68.1 per cent in 1960-61 to 80.5 per cent of the overall savings in 1972-73, while the share of public sector savings had declined from 23.3 per cent to 15.8 per cent, and that of the private corporate sector, from 8.6 per cent to 3.7 per cent during that period.(4) A number of empirical studies show that, in household savings, the individual's marginal propensity to consume increases as the rate of inflation increases,(5) which means that the individual and the family react to sharp price rises by maintaining consumption at the expense of savings. The two-year hyper inflation had three negative effects on household savings, which, as noted earlier, made up over 80 per cent of overall domestic savings. It reduced the surplus of income over expenditure out of which savings accrued, it reduced the value of past savings and introduced uncertainity as to the value of future savings, and so depressed the marginal propensity to save. It led the individual to shift his savings from deposits and cash balances to non-productive assets like gold, jewellery and real estate, as seen in the RBI comment that the growth rate in aggregate deposits which had slid from 22.4 per cent in 1971-72 to 20.4 per cent in 1972-73 and declined further to 16.0 per cent in 1973-74, and that the upsurge in consumption expenditures at current prices has been relatively greater than the increase in national-income.(6) As for the private corporate sector savings, during the inflationary spiral, firms increased their inventories, the stocks of both their inputs and outputs—inputs in order to guard against further price rise, and outputs in order to sell their products dearer in future. While the RBI's cautious comment that the absolute savings of the private corporate sector in 1973-74 was the same as that of the previous year's,(7) the decline in terms of total saving is seen in the rising incremental ratio of bank credit to saving which increased from 1.8:1 in 1970-71 to 3:1 in 1974-75. Public sector savings also declined—the government's, from the expected 14.6 per cent of its income in 1973-74 to 8.3 due to a sharp reduction in gross savings of departmental undertakings as well as the governments' increased non-developmental expenditures such as dearness allowances to government servants, the public enterprises' from 2.4 per cent before 1972-73 to less than 2 per cent in the following year, due to inflationary rise in input costs but not their product prices (plus low capacity use and **poor management**).

The two year inflation also deflected investment to non-priority sectors as the prices of essential commodities—steel, cement, paper, edible oils, sugar, etc.—were under some form of price control, while the non-essential goods were free of controls and attracted investment. It moved income distribution in favour of the speculator, trader, hoarder and black marketeer who were able to trade on the expectation that prices would continue to

(4) **GNP Trends**, CSO. April 1974.

(5) C. T. Kurien: **Indian Economic Crisis**, pp.67-70, Tables 6.1A, 6.1B, 6.2, Asia Publishing House, 1969.

(6) T. N. Srinivasan and P. Bardhan: **Poverty and Income Distribution in India.** pp.62-65, Statistical Publishing Society, 1974.
RBI Annual Report, Op. Cit., p.34.

(7) Op. Cit. Annual Report, p.12.

rise, made 100 to 200 per cent profits which had to be hidden from the sales tax, excise tax and income tax authorities, and helped swell the volume of black money. It reduced even further the low living standards of the poor majority by reducing their food offtake and increased by 5-10 per cent the number of people living below the poverty line. Finally inflation had serious effects on the government's fiscal status. It was accompanied by very high rates as well as a widening base of direct and indirect taxation, which in their totality has meant an additional 6 per cent of GNP being raised as taxes between 1960 and 1973-74. On the basis of the Union and States governments' capital and revenue disbursements, an increase from 22 per cent of the national income in 1960-61 to 33 per cent in 1973-74 [8] was drafted for these public expenditures.

Against this background, it is a positive **achievement for the economy that there has been the containment of the price inflation since September 1974, so that for the year June 1, 1974 to May 31, 1975** the price rise has been only 2.8 per cent, compared to the price increase from June 1, 1973 to May 31, 1974 of 28.5 per cent. [9] This trend is traceable to the fall in the prices of food articles by 10 per cent during the 12-month period (and its 41 per cent weight in the wholesale price index) and the larger decline in prices of industrial raw materials by 15 per cent (with its smaller 12 per sent weightage). The causes for this remarkable slow-down in inflation are very largely the fiscal and punitive measures (the 3 ordinances later turned into legislation as well as the MISA provisions against smugglers and tax dodgers) taken by the government, and the credit controls instituted by the Reserve Bank. The Prime Minister's 20 point programme, announced on July 1, in 4 of its points continues and intensifies this demand management effort namely: (a) the continuance of steps to bring down prices of essential commodities through streamlined production, procurement and distribution of essential commodities and strict economy in government expenditure; (b) special squads for valuation of property, prevention of tax evasion, and summary trials and deterrent punishment of economic offenders: (c) improvement in quality and supply of people's cloth: and (d) the ordinances for keeping under detention without judicial intervention all smugglers and confiscation of the properties of those absconding. This past (and future) price containment on the other hand has not been due to an increase in foodgrains production which was 107 million tonnes (67 million tonnes for kharif and 43 million tonnes for rabi) in 1973-74 and continued at 108 million tonnes (64 million tonnes for kharif and 44 million tonnes for rabi) for 1974-75, involving a shortfall of 7 to 8 million tonnes in relation to demand in each of the two years. [10] Nor has it been due to any increase in the production of industrial manufactures which stagnated at 0.7 per cent growth rate in 1973 and was 2 per cent higher over this low

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(8) "The Plethora of Public Spending:" **Monthly Commentary.** Vol XV I. No. 2 pp 42-43, 67-87, Indian Institute of Public Opinion.

(9) Index Number of Wholesale prices. op. cit.,

(10) Bulletin: RBI February 1975. Vol XXIX No. 2. p.125

performance in the first nine months of 1974. (11) It is one of the thesis of this note one among others that the potential of the fiscal, monetary and credit restraints and punitive action against economic offenders in holding back further price rises is now nearly exhausted.

Conditions for non-inflationary development:

The attainment or pursuit of our plan objective of price stability which is also described and non-inflationary development is therefore not "one of demand management only" but of "the pattern of growth" that is not only envisaged in the paper plan documents including the Prime Minister's 20 point declaration, but one that has actually been achieved and implemented. In fact the Fifth Plan document on this point reads like an unexceptionable economic theory document. It reminds us that we have got everything that we can out of demand management (that is, out of fiscal, monetary and credit controls and regulations), unaccompanied by any production increase, in slowing down the inflationary spiral. It states, in unequivocal terms, that price stability and non-inflationary development can be attained essentially by (a) achieving the needed rates of growth in the output of wage goods, which is agriculture and the related sectors of production and in the development of certain capital intensive industries like steel, coal, non-ferrous metals, cement and fertilisers as they ease the supplly constraints for the attainment of the targetted growth increase, (b) a proper mix between long gestation and short gestation projects, (c) raising the needed resources through taxation, borrowing and proper public sector pricing policies which involve (i) public sector undertakings earning higher rates of return, (ii) higher rates of direct taxes, especially on urban property and through socialisation of urbanisable land which is point 11 of Prime Minister's programme, (iii) a system of excise taxes which will not impinge on the cost of living of the common man or on intermediaries which enter into it and (iv) taxing the agricultural sector, (d) generating a higher rate of domestic savings, (e) cutting back on non-plan, non-development government expenditure, (f) the minimising if not avoiding of deficit financing, and (g) maximising export earnings and minimising import outgoes. (12) Looking at the economy during the 18 months since these policy objectives and policy instruments were established and confirmed in the draft Fifth Plan document, one finds that every one of the objectives and means for their attainment has been violated. What is needed for the economy's growth and stability and for the removal of poverty and attainment of self-reliance objectives is to take the necessary measures to implement these 7 points. The Prime Minister's 20 point programme, which is admittedly only a short-term plan, proposes action in 3 production areas— irrigation power and investment procedures. This limited approach must be seen against the wider context to get the economy moving, as otherwise the remaining distributive measures to correct current injustices may not be attained or may only be partially achieved.

Agricultural resurgence:

The most urgent of these is increase in

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(11) C. S. O. Index of Industrial Production 1973-74.

(12) **Draft Fifth Five-Year Plan.** pp.15-17.

foodgrains production. Here, year after year, agricultural investments have been increased—for the Fourth Plan Rs. 3,466 crores have been the public investment and Rs. 2,950 crores the private investment. During that period, Rs. 1,170 crores were spent on major and medium irrigation. In addition these were over 500 crores spent on various crash programmes, including the 1973 crash rabi programme. The results in terms of increased agricultural production have not been commensurate with these investments. In foodgrains production the increase in the Fourth Plan was 94 million tonnes in 1968-69 to 107 million tonnes in 1973-74—a growth rate of 2.7 per cent. In oil seeds and cotton the growth has been less than 1 per cent, sugarcane a little over 1 per cent and jute about nil.(13) In fact the latest RBI study(14) shows that the 81 per cent increase in agricultural production since 1950-51 is characterised by (a) about half the growth being due to the increase in the area under cultivation and not increased productivity, (b) a regular pattern of a fall in aggregate production during every third year, and (c) the foodgrains production increase being much lower than the cash crop product increase. When the agricultural output index shows an increase as it does for 1973-74 of 9.1 per çent, it is somewhat misleading as a growth indicator because (i) it is an increase over the decline of 7.9 per cent in 1971-72 and 0.4 per cent in 1972-73 over the respective previous years and (ii) the increase was due to the 12.3 per cent increase in non-foodgrains with about half that figure for increase in foodgrains production that year. There is a long-term problem to study in depth as to what has happened to the "Green Revolution", to the "intensive development programmes" in cotton, pulses, oilseeds, etc. One of the most disturbing facts is that only in three States, Tamil Nadu, Punjab and Haryana, the yields per hectare of rice or rice and wheat have been rising yearly during the five years of the Fourth Plan as a result of these investments. In five States they have been fluctuating from one year to the next, in six States they were stagnant and in two, West Bengal and Orissa, they actually declined.(15) One tentative conclusion suggested is that what is immediately needed to increase agricultural output including foodgrains production in each State is not further increase in the existing high level of investment in this sector but to take action so that the existing irrigation facilities are fully used. Out of 30.3 million hectares of the net irrigated area, only on 6.9 million hectares—that is only on one fourth of the net irrigated area —is there more than one crop raised. This means that alongside of the 5 million additional hectares that the Prime Minister's programme proposes to bring under irrigation, even a 50 per cent of our irrigation facilities can more than wipe out our annual foodgrains deficit. Similarly there is need to ensure that fertiliser supply and input, HYV seeds use—the seed fertiliser technology—are put to real and optimal use. Some of the States returns on HYV seeds and fertiliser use in non-irrigated areas raise questions of administrative wastage and poor farm management. The proper diffusion of our excellent research results and improvement

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(13) **Draft Fifth Plan,** Vol I, p.83 and Vol II, p.1, 5 and 21-25.

(14) RBI Bulletin, April 1975, Vol XXIX, No. 4, p.320.

(15) Estimates of Area and Production of Principal crops in India. Season and crop reports. Government of India.

in farm management, rather than large increases in agricultural investment is what is needed. It is time that attention at least equal to that of the seed fertiliser technology is paid to such basic issues as multiple cropping, integrated land and water use which goes beyond engineering works, selective mechanisation, dry farming technology, land reform, secure tenancy rights and fair minimum wages to the unorganised agricultural work force. These are essentially farm management and farmer education initiatives which must go together with the political will to make agrarian relationships a little less unjust. Points 2 to 6 of the Prime Minister's programme indicate such a political decision. On the fiscal side, in the interest of bringing about some measuras of equality in the context of the low tax burden on the agricultural vis-a-vis the heavy one on the non-agricultural community and of helping to meet the growing deficits of the States and the Union (the State overdrafts on April 30 had reached Rs. 427 crores), the States must now impose the graduated agricultural holdings tax recommended 3 years ago by the Raj Committee.

Industrial Rivival:

The next urgent issue is to get the manufacturing industry moving again. This sector has reached such a low level of stagnation, that apart from such specifics as investment acceleration, (referred to rather guardedly in the Prime Minister's programme) innovative management, a moothly functioning infrastructure, and ppropriate fiscal and credit policies, what is required is a national psychological shot in the arm which can generate a spirit of enterprise and optimism. It is my feeling that while Pokharan and Aryabhatta could have been such an occasion, the oil strike in Bombay High will provide that energising ambience of optimism which the business community stands so much in need of. Other signs for an industrial surge forward are not wanting. The RBI study of the 1001 non financial and non governmental medium and large private companies for 1972-73 shows, that unlike in its previous studies for 1970-71 and 1971-72, their rate of growth in after tax profits and assets formation are moving upward, along with greater reliance on owned funds in such assets formation. (16) Similarly investment in the public sector after declining in the last 2 years—by Rs. 371 crores in 1973-74 and Rs. 200 crores in 1974-75—is picking up. The Union government's development expenditure as a percentage of its total expenditure steadily declined from 60 per cent at the end of the Third plan to 46 per cent at the end of the Fourth plan.(17) For the current year, however, the total plan outlay will be 23 per cent higher than last years. Again the generation of internal resources by the public sector under takings as on March 31,1974 was asatisfactory Rs. 1,260 crores which is close to Fourth plan target of Rs 1,265 crores.(18) This was also one index of the generally improved performance of the enterprises. RBI and other surveys show on the other hand a growing capacity under utilisation in private sector units, which must be corrected. The infrastructural

(16) Bulletin; RBI. Vol XXIX. No. 2. pp.54-128 compared with Bulletin: RBI Vol XXVIII No. 2 pp 265 and 273.

(17) **Draft Fifth Plan.** pp.46-52

(18) **Report of the Bureau of Public Enterprises** 1973-74.

components are also beginning to look up. The power situation in 1974 and 1975 has been a serious obstacle to the full functioning of large, medium and small industries—cement, aluminium, textiles, steel, engineering etc. In spite of the reported increase of 1,720 MW in 1974-75 and the planned increase of 2,600 MW in 1975-76, reiterated as point 8 by the Prime Minister, which will increase energy production from 7,000 million units to 8,400 million units, the two years witnessed wide spread cut backs in manufacturing, production suspension of second and third shifts and increased lay off of workers. Now with the improved production of coal at the rate of 100 million tonnes for this year, the adequate supplies of furnace oil, which amounted to 4.5 million tonnes in 1974 against a demand of 3.5 million tonnes, both the energy and power situation for industries should improve.(19) There are two preconditions for this : first the coal should be transported to the thermal plants and industrial consumers by the railways—and here there is a lee-way to make up both in the wagon stock which has been stagnant during the Fourth Plan, and its quality and turn around which also are stagnant: (20) the provision for the purchase of wagons must be expanded beyond the 6,000 envisaged in this year's Railways budget: secondly there should be more of a planned use of coal, fuel oil and naphtha. The fertiliser industry should also register increased production with a little improvement in installed capacity and the additional capacity created this year in the private, co-operative and public sector. Similar perspectives face steel, cement, paper, pharmaceuticals, engineering, electric and electronic industries. The three industrial areas where there are special problems are textiles automobiles and capital goods. In the case of textiles, the problem of accumulated stocks can be solved only through a reduction in price: the further problem of the unsold quantites of controlled cloth calls for both changes in the product mix as admitted by the government and improved rural distribution outlets as suggested by NCAER's recent sample study for the Indian Cotton Mills Federation and included in the Prime Minister's points 10 and 9. In the case of automobiles, the main way out is through diversification plus the kind of relief in on a more general all India basis in sales taxes and surcharges provided by the West Bengal government. The serious problem of declining production is with the capital goods industries, HEL and BHEL in the public sector and similar units in the private sector have no orders after the next 2-3 years. This is in part due to the decline in domestic savings referred to earlier and stagnation of foreign aid. Some relief can be provided to this industrial sector by advance planning and placing of orders by the power, steel, cement and fertiliser units and by this sector entering the export market more actively.

For prodding industrial growth generally, fiscal, monetary and some anti-regulatory measures are indicated. First there is need to review prices and provide for an upward revision in the case of cement, paper and coal (which was done even as this note was being written in July) and for a system of dual pricing in the case of textiles, edible oils and other essential articles as is the case with foodgrains and sugar and, more recently,

(19) Report: Ministry of Energy. July 1975

(20) Railway Budget. 1975-76.

aluminium. Without such price adjustments, there will be no investments attracted to the industries concerned. Second, while continuing and intensifying credit planning similar to that now employed in the foodgrains and export sectors in all other industries, there is need to reduce the present penal lending rates which are a minimum of 11 per cent and actually range around 15 per cent, so that this part of the cost element of the firms does not act as a bottleneck. Third there is need to drop a number of quite useless and self defeating controls with regard to capacity use, expansion, product diversification on the basis of clearly established directives and execution as to the structure and institutions that are in the public interest. It is hoped that the cryptic reference to delaying licensing procedures in the Prime Minister's programme and its reiteration at the August meeting of the Board of Trade means this. Fourth the continuous increase in the rate and coverage of excise and other indirect taxes has now reached the end of the line from all points of view, as a means of increasing government revenue, as an instrument of social justice or as a means of stimulating increased production. The revenue from indirect taxes has increased in monetary terms by 15-20 per cent in each of the 4 years 1972-73 to 1975-76 along with a 10-15 per cent increase in per capita tax in money terms but the per capita tax in real terms has fallen by 10-12 per cent each year.(21) This means that the so called buoyancy of tax revenue is simply a reflection of the hyper inflation operating in the economy. The increasing indirect taxes are always accompanied by hopeful official statements that the common man's articles have been left untaxed. This is only partly true, as the taxes on textiles, tobacco, matches, salt, oil etc. affect him. Finally this increase in tax revenue has been accompanied by rates of industrial deceleration referred to earlier This is not to say that the impact of taxation is the cause for the decline in industrial growth. But it has not been a facilitating force, and in so far as it has added to the prices of consumer goods, it has been an inflationary force, and in so far as it has increased the cost of industrial inputs, it has been a cost push element. If there is revival of overall as well as industrial production, as a policy it is suggested that both indirect taxes and corporate taxes be held at present levels, and the future increase in their yields will then be a function of economic growth. Corporate taxes could be linked not only to profits but also to capacity use as one means of using the fiscal instrument to prod production. In direct taxes, the income tax exemption limit must be raised as one consequence of inflation again just announced as a follow up of the Prime Minister's programme point 17.

Foreign trade's role:

The country's foreign trade though small (around 2 per cent) in relation to its GNP —around Rs. 3,000 crores in exports and Rs 58,000 crores in GNP—is decisive for attaining the national objective of attainment of self reliance. Foodgrains imports of 5-6 million tonnes per annum, the crude imports at around 14 million tonnes per annum and some imports of phosphatic fertilisers at about 1 million tonnes per annum, what are called maintenance imports and the servicing of Rs. 600 crores of our foreign debts have to be paid for by

(21) Economic Surveys end Budget Proposals 1972-73 to 1975-76.

our exports plus such foreign aid, including deferred oil credits and the oil facility, that are available. The last year has been a bad year with exports registering an increase in value terms of 29 per cent at Rs. 3,253 crores as against an increase in imports of 49 per cent at Rs. 4,349 crores. (22) This gap of Rs. 1,096 crores which reached two and a half times the 1973-74 gap of Rs. 437 crores will worsen this year unless corrective action is taken. One immediate action is to review the Rupee-Sterling exchange link which has resulted in a 27.5 per cent devaluation of the Rupee since 1971. I trace about 20 per cent of last year's trade deficit to this backdoor devaluation, as it has, to that extent, increased the monetary cost of our imports. Its further repercussions on the Rupee trade with the Soviet Union and Eastern European countries (at least the unresolved controversy over the Rouble - Rupee rate) are a further cause for anxiety. I am for our choosing our basket of currencies and linking the Rupee to that basket. The strategy for the future should include action on two fronts. First given the falling trend of commodity prices, the quantum of exports must be doubled from last year's 5-6 per cent increase to a 10-12 per cent increase this year. The quantum rate of increase of exports of tea, coffee, jute, engineering goods, electric and electronic machinery, chemicals, iron ore, leather and textiles must register an overall doubling along with the export of the new items coal, cotton, steel, sugar, cement etc resulting in an export income of Rs. 4,000 crores—which is sensibly higher than the official target of Rs. 3,500 crores. For such an increase in exports, the production base of the commodities concerned must be expanded, as has been the constant theme of this paper, together with some restraints in domestic consumption. This calls for a rational policy of export incentives accompanied by a speedy and effective execution of such a policy. We go on announcing drawbacks, subsidies, exemption, etc for exporters but do not execute them. There are exporters who are still awaiting their excise tax rebates and cash refunds as of 1973. Second there should be a deliberate cutback in some of our import items, (23) notably newsprint, steel, cotton, edible oils, fertilisers along with crude oil, as Bombay High goes into production next year with a million tonnes yield, and food imports as we get nearer to our target of 127 million tonnes. The 1975-76 import bill should not exceed Rs. 4,000 crores and this should be the future basis of our import procedure and policy.

Savings Growth:

Probably one pressing need that this appraisal and the future projections indicate whether it be poverty eradication, agricultural upsurge, industrial growth or the closing of our trade gap—is an increase in domestic savings from the present 10 per cent to a more normal 16 per cent which the stabilisation and growth programmes proposed here can make possible. The marginal rate of savings is now around 19 per cent and with increasing incomes will have to be the 26 per cent assumed in the Fifth Plan. (24) The major responsibility here lies with the government and public sector undertakings which between them must increase their savings from the

(22) Op. Cit. **Bulletin RBI Vol XXIX No 4. p. 228.**

(23) **Maintenance Imports:** NCAER 1975

(24) Op. Cit. **Draft Fifth Plan** p.42.

small 3 per cent to 6 per cent of the GNP, while the private sector—corporate and household—need to go up from 9.5 to 12 per cent. The policy implications for this trend in terms of stable consumer prices, revised product prices, and tax incentives have been earlier indicated.

Employment:

An evaluation of our economy at any point of time must also refer to the serious and growing problem of unemployment and underemployment that it faces. The Bhagvathi Committee estimate, (25) now over 5 years old, of 18.7 million unemloyed is an underestimate, even in its unidimensional terms, but there are no other official estimates. The Union government reports that unemloyment increased by 35.22 per cent in 1972, 19.9 per cent in 1973 and 2.48 per cent in 1974, that the tip of the unemloyment iceberg—the registrations at emloyment exchanges—stood at 8.4 millions in December 1974 and that 1,20,000 new entrants are entering the work force every week. (26) To this should be added the underemployed and thinly employed. Certain consequences for policy and employment action follow from this impressionistic summation. First the major part of the new entrants into the work force will have to be employed in agriculture and this is where the ancillary agricultural occupations such as animal husbandary, dairying, poultry keeping, farm forestry etc. become decisive. Secondly the organised sector, *however growth oriented it* may develop into, will only be able to absorb a fraction of the unemployed and the new labour force entrants. Thirdly this is the case for a special employment programme similar to what the Maharashtra State government has embarked upon—for ensuring increasing self employment avenues and providing employment outside of the plan projects but within the frame of durable asset creating projects.

End Purpose:

The end purpose of the few suggestions made in this note is to make real the pledge contained in the Fifth Plan, the alleviation, if not to remove, the mass poverty of the country. This calls for structural changes in agrarian and industrial assets ownerships and relationships for which what is needed here is a political will on the part of the minority of the lower and upper middle classes. The distribution network which is now being renovated, restructured and put into place can deliver the goods to the poor majority in the country. The residual task is to produce these goods.

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(25) **Report of the Committee on Unemployment.** Vol.I. p.158 May 1973.

(26) **Reports of the Directorate of Labour and Employment,** 1971-72 to 1974-75

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Printed by Aslami Printers, Arunachalapuram, Adyar, Madras-600020.
Editor: Dr. Malcolm S. Adiseshiah.